

**CHAPTER 1555**  
**DEPARTMENT OF AGRICULTURE**  
**FOOD DEFINITIONS AND STANDARDS**

<b>ORGANIC FOOD</b>			
1555.0005	DEFINITIONS.	1555.2710	HUNGARIAN PAPRIKA.
1555.0006	ORGANIC FOOD REQUIREMENTS.	1555.2720	PIMENTON, PIMIENTO, SPANISH PAPRIKA.
1555.0007	EXCEPTIONS.	1555.2730	CELERY SEED.
1555.0008	TREATED SEED, TRANSPLANTS AND PROPAGATING PARTS.	1555.2740	CINNAMON.
1555.0009	RECORDS.	1555.2750	CEYLON CINNAMON.
1555.0010	INSPECTION AUTHORITY.	1555.2760	SAIGON CINNAMON, CASSIA.
1555.0012	PROHIBITIONS.	1555.2770	GROUND CINNAMON, GROUND CASSIA.
<b>VEGETABLES AND RELATED PRODUCTS</b>		1555.2780	CLOVES.
1555.2205	VEGETABLES.	1555.2790	CORIANDER SEED.
1555.2210	DRIED VEGETABLES.	1555.2800	CUMIN SEED.
1555.2220	PICKLES.	1555.2810	CURCUMA, TURMERIC.
1555.2225	PICKLED VEGETABLES.	1555.2820	DILL SEED.
1555.2230	LABELING.	1555.2830	FENNEL SEED.
1555.2240	SALT PICKLES.	1555.2840	GINGER.
1555.2250	SWEET PICKLES.	1555.2850	JAMAICA GINGER.
1555.2260	SAUERKRAUT	1555.2860	LIMED GINGER, BLEACHED GINGER.
1555.2270	LABELING.	1555.2870	HORSERADISH.
<b>SUGAR AND RELATED PRODUCTS</b>		1555.2880	PREPARED HORSERADISH.
1555.2280	SUGAR.	1555.2890	MACE.
1555.2290	GRANULATED, LOAF, CUT, MILLED, AND POWDERED SUGARS.	1555.2900	MACASSAR MACE, PAPUA MACE
1555.2300	MAPLE SUGAR, MAPLE CONCRETE.	1555.2910	MARJORAM, LEAF MARJORAM.
1555.2310	MASSECUITE, MELADA, MUSH SUGAR, AND CONCRETE.	1555.3000	MUSTARD SEED.
1555.2320	MOLASSES.	1555.3010	GROUND MUSTARD SEED, MUSTARD MEAL.
1555.2330	REFINERS' SYRUP, TREACLE.	1555.3020	MUSTARD CAKE.
1555.2340	SYRUP.	1555.3030	MUSTARD FLOUR, GROUND MUSTARD, MUSTARD.
1555.2350	SUGARCANE SYRUP.	1555.3040	PREPARED MUSTARD.
1555.2360	SORGHUM SYRUP.	1555.3050	NUTMEG.
1555.2370	MAPLE SYRUP.	1555.3060	MACASSAR NUTMEG, PAPUA NUTMEG, MALE NUTMEG, LONG NUTMEG.
1555.2380	SUGAR SYRUP.	1555.3070	PARADISE SEED, GRAINS OF PARADISE, GUINEA GRAINS, MELEGUETA PEPPER.
1555.2390	DEXTRROSE.	1555.3080	PARSLEY LEAVES.
1555.2400	CORN SYRUP.	1555.3090	BLACK PEPPER.
1555.2410	CANDY.	1555.3100	GROUND BLACK PEPPER.
<b>TEA AND COFFEE</b>		1555.3110	LONG PEPPER.
1555.2420	TEA.	1555.3120	WHITE PEPPER.
1555.2430	COFFEE.	1555.3130	SAFFRON.
<b>EDIBLE VEGETABLE OILS AND FATS</b>		1555.3140	SAGE.
1555.2440	EDIBLE FATS AND EDIBLE OILS.	1555.3150	SAVORY, SUMMER SAVORY.
1555.2450	CACAO FAT, COCOA FAT.	1555.3160	STAR ANISEED.
1555.2460	COCONUT OIL, COPRA OIL.	1555.3170	TARRAGON.
1555.2470	COCHIN OIL.	1555.3180	THYME.
1555.2480	CEYLON OIL.	<b>FLAVORING EXTRACTS AND RELATED PRODUCTS</b>	
1555.2490	CORN OIL, MAIZE OIL.	1555.3190	FLAVORING EXTRACT.
1555.2500	COTTONSEED OIL.	1555.3200	ALMOND EXTRACT.
1555.2510	OLIVE OIL, SWEET OIL.	1555.3210	OIL OF BITTER ALMONDS, COMMERCIAL.
1555.2520	PALM KERNEL OIL.	1555.3220	ANISE EXTRACT.
1555.2530	PEANUT OIL, ARACHIS OIL, EARTHNUIT OIL.	1555.3230	OIL OF ANISE.
1555.2540	POPPY SEED OIL.	1555.3240	CELERY SEED EXTRACT.
1555.2550	RAPESEED OIL, RAPE OIL, COLZA OIL.	1555.3250	OIL OF CELERY SEED.
1555.2560	SOYBEAN OIL, SOY OIL, SOJA OIL.	1555.3260	CINNAMON EXTRACT, CASSIA EXTRACT, CASSIA CINNAMON EXTRACT.
1555.2570	SESAME OIL, GINGILLI OIL, TEEL OIL, BENNE OIL.	1555.3270	OIL OF CINNAMON, OIL OF CASSIA, OIL OF CASSIA CINNAMON.
1555.2580	SUNFLOWER OIL.	1555.3280	CEYLON CINNAMON EXTRACT.
<b>SPICES AND CONDIMENTS</b>		1555.3290	OIL OF CEYLON CINNAMON.
1555.2590	TERMS "DRIED" AND "STARCH."	1555.3300	CLOVE EXTRACT.
1555.2600	SPICES.	1555.3310	OIL OF CLOVES.
1555.2610	ALLSPICE, PIMIENTO.	1555.3320	GINGER EXTRACT.
1555.2620	ANISE, ANISEED.	1555.3330	LEMON EXTRACT.
1555.2630	BAY LEAVES.	1555.3340	OIL OF LEMON.
1555.2640	CAPERS.	1555.3350	TERPENELESS EXTRACT OF LEMON.
1555.2650	CARAWAY, CARAWAY SEED.	1555.3360	TERPENELESS OIL OF LEMON.
1555.2660	CARDAMON.	1555.3370	NUTMEG EXTRACT.
1555.2670	CARDAMON SEED.	1555.3380	OIL OF NUTMEG.
1555.2680	RED PEPPER.	1555.3390	ORANGE EXTRACT.
1555.2690	CAYENNE PEPPER, CAYENNE.	1555.3400	OIL OF ORANGE.
1555.2700	PAPRIKA.	1555.3410	TERPENELESS EXTRACT OF ORANGE.
		1555.3420	TERPENELESS OIL OF ORANGE.
		1555.3430	PEPPERMINT EXTRACT.
		1555.3440	PEPPERMINT.
		1555.3450	OIL OF PEPPERMINT.
		1555.3460	ROSE EXTRACT.

1555.3470	ATTAR OF ROSES.	1555.4270	WATER AND PEACH JUICE.
1555.3480	SAVORY EXTRACT.	1555.4280	LIQUID INGREDIENT AND SACCHARINE INGREDIENT.
1555.3490	OIL OF SAVORY.		
1555.3500	SPEARMINT EXTRACT.	1555.4290	DENSITIES.
1555.3510	SPEARMINT.	1555.4300	DEFINITIONS.
1555.3520	OIL OF SPEARMINT.	1555.4310	LABEL STATEMENT OF OPTIONAL INGREDIENTS.
1555.3530	STAR ANISE EXTRACT.		
1555.3540	OIL OF STAR ANISE.	1555.4320	PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.
1555.3550	SWEET BASIL EXTRACT.		
1555.3560	SWEET BASIL; OIL OF SWEET BASIL.	1555.4330	STANDARD OF QUALITY FOR CANNED PEACHES.
1555.3570	SWEET MARJORAM EXTRACT; MARJORAM EXTRACT.		
1555.3580	OIL OF MARJORAM.	1555.4340	METHOD FOR TESTING.
1555.3590	THYME EXTRACT; OIL OF THYME.	1555.4345	LABEL STATEMENT OF SUBSTANDARD QUALITY.
1555.3600	TONKA EXTRACT.		
1555.3610	TONKA BEAN.	1555.4350	STANDARD OF FILL OF CONTAINER FOR CANNED PEACHES.
1555.3620	WINTERGREEN EXTRACT.		
1555.3630	OIL OF WINTERGREEN.	1555.4360	LABEL STATEMENT OF SUBSTANDARD FILL.
1555.3640	EXTRACT AND FLAVOR.		
1555.3650	DEFINITIONS.	1555.4370	CANNED PEACHES WITH RUM.
1555.3660	VANILLA EXTRACT.	1555.4380	CANNED APRICOTS.
1555.3680	LABEL STATEMENTS.	1555.4390	OPTIONAL APRICOT INGREDIENTS.
1555.3700	CONCENTRATED VANILLA EXTRACT.	1555.4400	OPTIONAL PACKING MEDIA.
1555.3720	VANILLA FLAVORING.	1555.4410	WATER AND APRICOT JUICE.
1555.3730	CONCENTRATED VANILLA FLAVORING.	1555.4420	LIQUID INGREDIENT AND SACCHARINE INGREDIENT.
1555.3750	VANILLA-VANILLIN EXTRACT.		
1555.3770	VANILLA-VANILLIN FLAVORING.	1555.4440	DENSITIES.
1555.3780	VANILLA POWDER.	1555.4450	DEFINITIONS.
1555.3790	ANTICAKING INGREDIENTS.	1555.4460	LABEL STATEMENT OF OPTIONAL INGREDIENTS.
1555.3800	NAME.		
1555.3830	VANILLA-VANILLIN POWDER.	1555.4470	PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.
1555.3850	IMITATIONS, FANCIFUL NAMES.		
1555.3860	LABEL STATEMENT.	1555.4480	STANDARD OF QUALITY FOR CANNED APRICOTS.
1555.3870	FANCIFUL TRADE NAMES OR COINED NAMES.		
1555.3880	IMITATION VANILLA EXTRACT OR IMITATION VANILLA FLAVOR.	1555.4490	METHOD FOR TESTING.
1555.3890	EXTRACT OF VANILLA AND TONKA OR EXTRACT OF TONKA AND VANILLA.	1555.4500	LABEL STATEMENT OF SUBSTANDARD QUALITY.
1555.3900	SUCH TERMS AS "DOUBLE" AND "TRIPLE."		
1555.3910	TERM "CONCENTRATED."	1555.4510	STANDARD FILL OF CONTAINER FOR CANNED APRICOTS.
1555.3920	STRENGTH OF EXTRACT OR FLAVOR.	1555.4520	LABEL STATEMENT OF SUBSTANDARD FILL.
	<b>VINEGARS</b>		
1555.3930	VINEGAR, CIDER VINEGAR, APPLE VINEGAR.	1555.4530	CANNED APRICOTS WITH RUM.
1555.3940	WINE VINEGAR, GRAPE VINEGAR.	1555.4540	CANNED PEARS.
1555.3950	MALT VINEGAR.	1555.4550	OPTIONAL PEAR INGREDIENTS.
1555.3960	SUGAR VINEGAR.	1555.4560	OPTIONAL PACKING MEDIA.
1555.3970	GLUCOSE VINEGAR.	1555.4570	WATER AND PEAR JUICE.
1555.3980	SPIRIT VINEGAR, DISTILLED VINEGAR, GRAIN VINEGAR.	1555.4580	LIQUID INGREDIENT AND SACCHARINE INGREDIENT.
	<b>ALMOND PASTES AND KERNEL PASTES</b>		
1555.3990	ALMOND PASTE.	1555.4590	DENSITIES.
1555.4000	KERNEL PASTES.	1555.4600	DEFINITIONS.
	<b>BAKING POWDER</b>	1555.4610	LABEL STATEMENT OF OPTIONAL INGREDIENTS.
1555.4100	BAKING POWDER.		
	<b>SALT</b>	1555.4620	PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.
1555.4110	TABLE SALT, DAIRY SALT.	1555.4630	STANDARD OF QUALITY FOR CANNED PEARS.
	<b>NONALCOHOLIC BEVERAGES</b>		
1555.4120	SODA WATER.	1555.4640	METHOD FOR TESTING.
1555.4130	OPTIONAL INGREDIENTS.	1555.4650	LABEL STATEMENT OF SUBSTANDARD QUALITY.
1555.4140	NAMES OF BEVERAGES.		
1555.4150	OPTIONAL INGREDIENTS LABELING.	1555.4660	STANDARD FILL OF CONTAINER FOR CANNED PEARS.
1555.4160	PLACEMENT OF LABEL STATEMENTS.	1555.4670	LABEL STATEMENT OF SUBSTANDARD FILL.
1555.4170	BACTERIAL, YEAST, AND MOLD STANDARDS FOR NONALCOHOLIC BEVERAGES.		
1555.4180	PURIFIED WATER.	1555.4680	CANNED PEARS WITH RUM.
	<b>OTHER BEVERAGES</b>	1555.4690	CANNED CHERRIES.
1555.4190	PHOSPHATE BEVERAGE.	1555.4700	OPTIONAL CHERRY INGREDIENTS.
1555.4200	INFORMATION ON BOTTLES.	1555.4710	OPTIONAL PACKING MEDIA.
1555.4210	MISBRANDING.	1555.4720	WATER AND CHERRY JUICE.
1555.4220	CERTAIN NONALCOHOLIC BEVERAGES.	1555.4730	LIQUID INGREDIENT AND SACCHARINE INGREDIENT.
1555.4230	MODIFIED FRUIT JUICE.		
	<b>CANNED FRUITS</b>	1555.4740	DENSITIES.
1555.4240	CANNED PEACHES.	1555.4750	DEFINITIONS.
1555.4250	OPTIONAL PEACH INGREDIENTS.	1555.4760	LABEL STATEMENT OF OPTIONAL INGREDIENTS.
1555.4260	OPTIONAL PACKING MEDIA.	1555.4770	PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.
		1555.4780	STANDARD OF QUALITY FOR CANNED CHERRIES.
		1555.4790	TESTS FOR STANDARDS OF QUALITY FOR PITTED CANNED CHERRIES.
		1555.4800	TESTS FOR STANDARDS OF QUALITY FOR UNPITTED CANNED CHERRIES.
		1555.4810	LABEL STATEMENT OF SUBSTANDARD QUALITY.
		1555.4820	STANDARD OF FILL OF CONTAINER FOR CANNED CHERRIES.

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1555.4830	LABEL STATEMENT OF SUBSTANDARD FILL.	1555.5420	PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.
1555.4840	CANNED CHERRIES WITH RUM.	1555.5430	STANDARD OF QUALITY OF CANNED GREEN BEANS.
1555.4845	CANNED FRUIT COCKTAIL, CANNED COCKTAIL FRUITS, CANNED FRUITS FOR COCKTAIL.	1555.5440	METHOD OF TESTING.
1555.4850	FRUIT INGREDIENTS.	1555.5450	LABEL STATEMENT OF SUBSTANDARD QUALITY.
1555.4860	OPTIONAL PACKING MEDIA.	1555.5455	CANNED WAX BEANS.
1555.4870	LIQUID INGREDIENT AND SACCHARINE INGREDIENT.	1555.5460	PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.
1555.4880	DEFINITIONS.	1555.5470	STANDARD OF QUALITY FOR CANNED WAX BEANS.
1555.4890	OPTIONAL INGREDIENTS LABELING.	1555.5480	LABEL STATEMENT OF SUBSTANDARD QUALITY.
1555.4900	STANDARD OF QUALITY FOR CANNED FRUIT COCKTAIL.	1555.5490	CANNED CORN, CANNED SWEET CORN, CANNED SUGAR CORN.
1555.4910	LABEL STATEMENT OF SUBSTANDARD QUALITY.	1555.5500	CORN INGREDIENTS.
1555.4920	STANDARD OF FILL OF CONTAINER FOR CANNED FRUIT COCKTAIL.	1555.5510	DESCRIPTIVE LABELING FOR CANNED CORN.
1555.4930	LABEL STATEMENT OF SUBSTANDARD FILL.	1555.5520	PARTS OF NAME.
1555.4940	CANNED PINEAPPLE.	1555.5530	OPTIONAL SEASONING INGREDIENTS LABELING.
1555.4950	OPTIONAL PACKING MEDIA.	1555.5540	MONOSODIUM GLUTAMATE.
1555.4955	PINEAPPLE JUICE; CLARIFIED JUICE.	1555.5550	OPTIONAL STARCH INGREDIENT.
1555.4960	OPTIONAL SWEETENING INGREDIENTS.	1555.5560	PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.
1555.4970	DEFINITIONS.	1555.5570	STANDARD OF QUALITY FOR CANNED CORN.
1555.4980	NAMES.	1555.5580	ALCOHOL-INSOLUBLE SOLIDS LIMIT.
1555.4990	OPTIONAL PACKING MEDIA LABELING.	1555.5590	METHOD FOR TESTING WHOLE-KERNEL CORN AND EVAPORATED CORN.
1555.5000	PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.	1555.5600	METHOD FOR TESTING FRITTER CORN AND CREAM-STYLE CORN.
1555.5010	STANDARD OF QUALITY FOR CANNED PINEAPPLE.	1555.5610	LABEL STATEMENT OF SUBSTANDARD QUALITY.
1555.5020	METHODS.	1555.5620	STANDARD OF FILL OF CONTAINER FOR CANNED CORN WHERE CORN INGREDIENT IS FRITTER CORN, GROUND CORN, OR CREAM-STYLE CORN.
1555.5030	LABEL STATEMENT OF SUBSTANDARD QUALITY.	1555.5630	LABEL STATEMENT OF SUBSTANDARD FILL.
1555.5040	STANDARD OF FILL OF CONTAINER FOR CANNED CRUSHED PINEAPPLE.	1555.5640	CANNED FIELD CORN
1555.5050	LABEL STATEMENT OF SUBSTANDARD FILL.	1555.5650	CANNED FIELD CORN WHERE CORN INGREDIENT IS IN ONE OF THE FORMS KNOWN AS FRITTER FIELD CORN, GROUND FIELD CORN, OR CREAM-STYLE FIELD CORN.
1555.5060	CANNED PINEAPPLE JUICE.	1555.5660	STANDARD FILL OF CONTAINER FOR CANNED MUSHROOMS.
1555.5070	SUGAR.	1555.5670	DETERMINATION OF WATER CAPACITY OF CONTAINERS.
1555.5080	NAME.	1555.5680	DETERMINATION OF DRAINED WEIGHT.
1555.5090	OPTIONAL SWEETENING INGREDIENT	1555.5690	LABEL STATEMENT OF SUBSTANDARD FILL.
1555.5100	LABEL STATEMENT OF OPTIONAL INGREDIENTS.	1555.5700	CANNED VEGETABLES OTHER THAN THOSE SPECIFICALLY REGULATED.
1555.5110	CANNED PINEAPPLE JUICE.	1555.5710	TABLE: IDENTITY OF OTHER CANNED VEGETABLES.
1555.5120	METHODS.	1555.5720	ADDITION OF WATER, ASPARAGUS JUICE, CITRIC ACID, OR VINEGAR.
1555.5130	LABEL STATEMENT OF SUBSTANDARD QUALITY.	1555.5730	OPTIONAL INGREDIENTS.
1555.5140	STANDARD OF FILL OF CONTAINER FOR CANNED PINEAPPLE JUICE.	1555.5740	NAME OF CANNED VEGETABLE.
1555.5150	LABEL STATEMENT OF SUBSTANDARD FILL.	1555.5745	FORM OF VEGETABLE.
1555.5160	CANNED PRUNE JUICE.	1555.5750	OPTIONAL INGREDIENTS LABELING.
1555.5170	OPTIONAL ACIDIFYING INGREDIENTS.	1555.5760	PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.
1555.5180	LABEL DECLARATION OF NAME OF FOOD.		
1555.5210	CANNED FIGS.		
1555.5220	OPTIONAL FIG INGREDIENTS.		
1555.5230	OPTIONAL PACKING MEDIA.		
1555.5240	LIQUID INGREDIENT AND SACCHARINE INGREDIENT.		
1555.5250	DENSITIES.		
1555.5260	DEFINITIONS.		
1555.5270	LABEL STATEMENT OF OPTIONAL INGREDIENTS.		
1555.5280	PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.		
	<b>CANNED VEGETABLES</b>		<b>TOMATO PRODUCTS</b>
1555.5290	CANNED PEAS	1555.5770	TOMATO JUICE
1555.5300	OPTIONAL INGREDIENTS.	1555.5780	YELLOW TOMATO JUICE.
1555.5310	OPTIONAL SEASONINGS.	1555.5790	CATSUP, KETCHUP, CATCHUP.
1555.5320	SEALING AND PROCESSING.	1555.5800	CORN SYRUP; GLUCOSE SYRUP AND DRIED GLUCOSE SYRUP.
1555.5330	OPTIONAL INGREDIENTS LABELING.	1555.5820	LABEL STATEMENT OF OPTIONAL INGREDIENTS.
1555.5340	PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.	1555.5830	TOMATO PUREE, TOMATO PULP.
1555.5350	STANDARD OF QUALITY FOR CANNED PEAS.	1555.5840	LABEL STATEMENT OF OPTIONAL INGREDIENTS.
1555.5360	METHODS OF TESTING.	1555.5850	TOMATO PASTE.
1555.5370	LABEL STATEMENT OF SUBSTANDARD QUALITY.	1555.5860	LABEL STATEMENT OF OPTIONAL INGREDIENTS.
1555.5380	STANDARD OF FILL OF CONTAINER FOR CANNED PEAS.	1555.5870	PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.
1555.5390	LABEL STATEMENT OF SUBSTANDARD FILL.	1555.5880	CANNED TOMATOES.
1555.5400	CANNED GREEN BEANS.	1555.5890	STANDARD OF QUALITY FOR CANNED TOMATOES.
1555.5410	OPTIONAL INGREDIENTS LABELING.		

1555.5900 TESTING METHOD.  
 1555.6000 LABEL STATEMENT OF SUBSTANDARD QUALITY.  
 1555.6010 EXCESSIVE PEELS AND BLEMISHES.  
 1555.6020 STANDARD OF FILL OF CONTAINER FOR CANNED TOMATOES.  
 1555.6030 LABEL STATEMENT OF SUBSTANDARD FILL.

**LIQUID HONEY**

1555.6040 DEFINITIONS.  
 1555.6050 HONEY GRADES.  
 1555.6060 MINNESOTA GRADE AA PREMIUM HONEY.  
 1555.6070 MINNESOTA GRADE A FANCY HONEY.  
 1555.6080 COLOR STANDARDS.  
 1555.6090 MINNESOTA GRADE B CHOICE HONEY.  
 1555.6100 MINNESOTA GRADE C STANDARD HONEY.  
 1555.6110 MINNESOTA GRADE D SUBSTANDARD HONEY.  
 1555.6120 MINNESOTA GRADE UTILITY HONEY.  
 1555.6130 FACTOR RATING FOR FLAVOR, ABSENCE OF DEFECTS, AND CLARITY.  
 1555.6140 GRADE FACTORS.  
 1555.6150 COLOR AND MOISTURE.  
 1555.6160 TABLE OF COLOR AND MOISTURE STANDARDS TO GRADE MINNESOTA HONEY.  
 1555.6170 FLAVOR.  
 1555.6180 GOOD FLAVOR.  
 1555.6190 REASONABLY GOOD FLAVOR.  
 1555.6200 FAIRLY GOOD FLAVOR.  
 1555.6210 OFF FLAVOR.  
 1555.6220 ABSENCE OF DEFECTS.  
 1555.6230 HONEY FREE FROM DEFECTS.  
 1555.6240 HONEY REASONABLY FREE FROM DEFECTS.  
 1555.6250 HONEY FAIRLY FREE FROM DEFECTS.  
 1555.6260 HONEY THAT FAILS TO MEET THE REQUIREMENTS OF MINNESOTA GRADE C STANDARD HONEY.  
 1555.6270 CLARITY.  
 1555.6280 CLEAR HONEY.  
 1555.6290 REASONABLY CLEAR HONEY.  
 1555.6300 FAIRLY CLEAR HONEY.  
 1555.6310 HONEY THAT FAILS TO MEET THE REQUIREMENTS OF MINNESOTA GRADE C STANDARD HONEY.  
 1555.6320 REQUIREMENT FOR GRADES WHEN HONEY IS ADVERTISED AT A PRICE.

**APPLES**

1555.6330 DEFINITIONS.  
 1555.6340 DAMAGE.  
 1555.6350 SERIOUSLY DEFORMED.  
 1555.6360 SERIOUS DAMAGE.  
 1555.6365 AREA.  
 1555.6370 APPLICABILITY.  
 1555.6380 APPLES NOT MEETING GRADE REQUIREMENTS.  
 1555.6390 GRADES.  
 1555.6400 COLOR REQUIREMENTS.  
 1555.6410 SOLID RED VARIETIES.  
 1555.6420 STRIPED RED VARIETIES.  
 1555.6430 COLOR REQUIREMENTS FOR SPECIFIED MINNESOTA GRADES OF APPLES, BY VARIETIES.  
 1555.6440 UTILITY DESIGNATION.  
 1555.6450 TOLERANCES.

1555.6460 APPLYING TOLERANCES.  
 1555.6470 CONTENTS OF INDIVIDUAL PACKAGES IN A LOT.  
 1555.6480 BASIS OF CALCULATING PERCENTAGES.  
 1555.6490 CONDITION AFTER STORAGE OR TRANSIT.  
 1555.6500 SIZE REQUIREMENTS.  
 1555.6510 MEASUREMENT FOR MINIMUM SIZE.  
 1555.6520 VARIATIONS.  
 1555.6530 SUGGESTED ABBREVIATIONS FOR MARKING CONTAINERS.

**POTATOES**

1555.6540 DEFINITIONS.  
 1555.6550 MINNESOTA FANCY POTATOES.  
 1555.6560 MINNESOTA NO. 1 POTATOES.  
 1555.6570 MINNESOTA NO. 2 POTATOES.  
 1555.6580 MINNESOTA UTILITY POTATOES.  
 1555.6590 UNCLASSIFIED POTATOES.  
 1555.6600 SIZE.  
 1555.6610 DIAMETER.  
 1555.6620 TOLERANCES FOR SIZE.  
 1555.6630 SKINNING CLASSIFICATION.  
 1555.6640 APPLICATION OF TOLERANCES.  
 1555.6650 BULK DISPLAY.  
 1555.6660 PACKAGED POTATOES LABELING.  
 1555.6670 TAG LABELS.  
 1555.6680 GRADE EXCEPTIONS.  
 1555.6690 PACKAGED POTATOES.  
 1555.6700 USED CONTAINERS.  
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 1555.6730 DEFINITIONS.  
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 1555.7420 TOM AND JERRY BASE.  
 1555.7430 LABELING.  
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 1555.7460 PASTEURIZATION.  
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 1555.7480 RECORDS.  
 1555.7490 BACTERIAL COUNTS AND COLIFORM COUNTS.  
 1555.7500 SANITATION.

**ORGANIC FOOD**

**1555.0005 DEFINITIONS.**

Subpart 1. **Scope.** The definitions in subparts 2 to 13 apply to parts 1555.0005 to 1555.0012.

Subp. 2. [Repealed, 15 SR 11]

Subp. 3. **Department.** "Department" means the Minnesota Department of Agriculture.

Subp. 4. **Drug.** "Drug" means an article intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in animals other than humans and

articles other than feed intended to affect the structure or any function of an animal's body.

Subp. 5. **Fertilizer material.** "Fertilizer material" means a substance containing nitrogen, phosphorus, potassium, or a recognized plant food nutrient, or a compound which is used primarily for its plant nutrient content or for compounding mixed fertilizers except unmanipulated animal and vegetable manures.

Subp. 6. **Horticultural oils.** "Horticultural oils" means a highly refined paraffinic petroleum product made solely for use on plants at specific dosages to act as an insecticide or miticide.

Subp. 7. **Natural organic fertilizer.** "Natural organic fertilizer" means materials derived from either plant or animal products containing one or more elements (other than carbon, hydrogen, and oxygen) which are essential for plant growth. These materials may be subjected to biological degradation processes under normal conditions of aging, rainfall, sun curing, air drying, composting, rotting, enzymatic or anaerobic or aerobic bacterial action, or any combination of these. These materials must not be mixed with synthetic materials or changed in any physical or chemical manner from their initial state except by physical manipulation such as drying, cooking, chopping, grinding, shredding, or pelleting.

Subp. 8. **Pesticide.** "Pesticide" means a substance or mixture of substances intended for preventing, destroying, repelling, or mitigating a pest, and a substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

Subp. 9. **Plant amendment.** "Plant amendment" means a substance applied to plants or seeds which is intended to improve conditions which facilitate germination, growth, yield, product quality, reproduction, flavor, or other desirable characteristics of plants except commercial fertilizers, soil amendments, agricultural liming materials, animal and vegetable manures, and pesticides.

Subp. 10. **Soap.** "Soap" means fatty acids and their salts if the fatty acid occurs in nature.

Subp. 11. **Soil amendment.** "Soil amendment" means (1) an aggregant, additive, or organic chemical substances, (2) a chemically or physically modified natural substance, (3) a naturally occurring substance, or (4) a manufacturing by-product, mixed or unmixed, which is represented as having a primary function of forming or stabilizing soil aggregants in soil to which it is to be applied and thereby improving the resistance of the soil to the slaking action of water, increasing its water and air permeability, improving the resistance of its surface to crusting, improving its ease of cultivation, or otherwise favorably modifying its structural or physical properties.

Subp. 12. **Synthetic.** "Synthetic" means a complex compound artificially produced usually by chemical synthesis of elements or simple compounds.

Subp. 13. [Repealed, 15 SR 11]

**Statutory Authority:** *MS s 31.94; 31.95*

**History:** *12 SR 1366; 15 SR 11; 17 SR 1279*

#### 1555.0006 ORGANIC FOOD REQUIREMENTS.

Food for which the terms "organic food," "organically grown food," or a derivative of the word "organic" are used must be food which:

A. was produced, harvested, cleaned, stored, transported, distributed, processed, and packaged without the use of artificial irradiation, synthetic pesticides, synthetic plant or soil amendments, or fertilizer materials except natural organic fertilizers or as specifically allowed in part 1555.0007;

B. contains no added artificial coloring, artificial flavoring, or artificial preservative;

C. in the case of perennial crops, was grown in soil or growth medium free of synthetic pesticides, synthetic soil and plant amendments, and synthetic fertilizer

materials, except as specifically allowed in part 1555.0007, for three years before and throughout the entire growing and harvesting season of the crop;

D. in the case of annual crops and two-year crops, was grown in soil free of synthetic pesticides, synthetic soil and plant amendments, and synthetic fertilizer materials, except as allowed in part 1555.0007, for three years before planting or transplanting and throughout the entire growing and harvesting of the crop;

E. in the case of meat, poultry, wild or domesticated game, shell fish, other nonplant life, or fish, was raised for at least the final 60 percent of its sale weight:

(1) on food produced in conformity with item C or D;

(2) without the application of any synthetic pesticides or drugs;

(3) in a habitat for growth or culture that has been free of synthetic fertilizers, pesticides, hormones, antibiotics, growth stimulants, and arsenicals for at least three years, except as allowed in part 1555.0007;

(4) without any drug or synthetic pesticides administered or introduced by any method, except for treatment of a specific disease or malady as diagnosed by a veterinarian not less than 90 days before the slaughter for meat, poultry, wild or domestic game, shell fish, other nonplant life, or fish; and

F. in the case of milk or eggs, was produced by animals raised in accordance with item E, except that no synthetic pesticide or drug was administered or introduced less than 30 days before the production of the milk or eggs.

**Statutory Authority:** *MS s 31.94*

**History:** *12 SR 1366*

#### 1555.0007 EXCEPTIONS.

Exceptions to part 1555.0006 include:

A. enzyme sources;

B. cultures of living or killed microorganisms;

C. bordeaux mixtures;

D. elemental sulfur and lime sulfur;

E. gypsum;

F. diatomaceous earth;

G. basic copper sulfate;

H. horticultural oils;

I. fish emulsion that is not synthetically produced;

J. soap;

K. naturally occurring mineral materials that are not chemically modified;

L. botanically derived pesticides containing no other active pesticidal ingredient, which are not synthetically produced but which may contain synthetic compounds such as emulsifiers, synergists, and carriers; and

M. pesticide or other toxic chemical residues, not to exceed ten percent of the tolerance established by the United States Food and Drug Administration or Environmental Protection Agency.

**Statutory Authority:** *MS s 31.94*

**History:** *12 SR 1366*

#### 1555.0008 TREATED SEED, TRANSPLANTS AND PROPAGATING PARTS.

Subpart 1. **Organic food producers.** If organic food producers wish to purchase and use treated seed, treated transplants, or treated propagating parts, they must submit a written statement to the department that usable untreated seed transplants or propagating parts of the desired kind or variety are not available. A record of the purchase, including the kind and amount of seed, variety if any, the name and address

of the seller and the date of purchase, must be maintained by the producer for three years after the crop is harvested.

Subp. 2. **Certified organic food producers.** If certified organic food producers wish to purchase and use treated seed, treated transplants, or treated propagating parts, they must submit a written statement to the certifying agency at the time of certification that usable untreated seed transplants or propagating parts of the desired kind or variety are not available. A record of the purchase, including the kind and amount of seed, variety if any, the name and address of the seller and the date of purchase, must be maintained by the producer for three years after the crop is harvested.

**Statutory Authority:** *MS s 31.94*

**History:** *12 SR 1366*

#### 1555.0009 RECORDS.

Subpart 1. **Producer.** A producer who sells food derived from a crop which the producer has grown and which is identified as organic, organically grown, or by a derivative of the word "organic," shall accurately keep the following records: year and type of crop; location of the acreage used for growing that crop; additions made to the soil or applied to that crop; use of any treated seed, treated transplants, or treated propagating parts; and quantity, date, and acreage harvested. These records must be retained for three years after the food is sold and delivered by the producer.

Subp. 2. **Processors and manufacturers.** A person who processes or manufactures a food which is sold or identified as organic, organically grown, or by a derivative of the word "organic," shall keep accurate records of the ingredients of that food, the names and addresses of persons from whom the ingredients were purchased, the date and quantity of ingredients purchased, and copies of invoices. These records must be retained for three years after the food is sold and delivered.

Subp. 3. **Vendors.** A person who sells a food subject to subpart 1 or 2, shall keep accurate records of the names and addresses of persons from whom that food was purchased, the date and quantity of food purchased, and copies of invoices. These records must be retained for three years after the food is sold and delivered.

Subp. 4. **Provision of information.** A producer, processor, manufacturer, or vendor of food subject to subpart 1, 2, or 3 shall provide the department, on demand, relevant information from the records required under this part.

**Statutory Authority:** *MS s 31.94*

**History:** *12 SR 1366*

#### 1555.0010 INSPECTION AUTHORITY.

The department may inspect at reasonable times an area where food identified, labeled, or advertised as organic, organically grown, or by a derivative of the word "organic," is grown, processed, manufactured, stored, or sold.

**Statutory Authority:** *MS s 31.94*

**History:** *12 SR 1366*

#### 1555.0011 [Repealed, 15 SR 11]

#### 1555.0012 PROHIBITIONS.

No claim or implication may be made in the identification, labeling, advertising, or promotion of a food product, including processed food products, that the food product is organic, organically grown, or by a derivative of the word "organic," unless the product, including all of its ingredients, conforms to the requirements of parts 1555.0005 to 1555.0012.

Food that contains one or more organic ingredients may contain an information statement on the label, such as: "Contains organic rye flour," in letters not to exceed

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one-half the height of the letters used in the product identity. The word “organic” also must precede the name of each organic ingredient identified in the list of ingredients.

**Statutory Authority:** *MS s 31.94*

**History:** *12 SR 1366*

**1555.0013** [Repealed, 15 SR 11]

**1555.0020** [Repealed, 24 SR 546]

**1555.0030** [Repealed, 24 SR 546]

**1555.0040** [Repealed, 24 SR 546]

**1555.0050** [Repealed, 24 SR 546]

**1555.0060** [Repealed, 24 SR 546]

**1555.0070** [Repealed, 24 SR 546]

**1555.0080** [Repealed, 24 SR 546]

**1555.0090** [Repealed, 24 SR 546]

**1555.0100** [Repealed, 24 SR 546]

**1555.0110** [Repealed, 24 SR 546]

**1555.0120** [Repealed, 24 SR 546]

**1555.0130** [Repealed, 24 SR 546]

**1555.0140** [Repealed, 24 SR 546]

**1555.0160** [Repealed, 24 SR 546]

**1555.0170** [Repealed, 24 SR 546]

**1555.0180** [Repealed, 24 SR 546]

**1555.0190** [Repealed, 24 SR 546]

**1555.0200** [Repealed, 24 SR 546]

**1555.0210** [Repealed, 24 SR 546]

**1555.0230** [Repealed, 24 SR 546]

**1555.0240** [Repealed, 24 SR 546]

**1555.0250** [Repealed, 24 SR 546]

**1555.0260** [Repealed, 24 SR 546]

**1555.0265** [Repealed, 24 SR 546]

**1555.0270** [Repealed, 24 SR 546]

**1555.0280** [Repealed, 24 SR 546]

**1555.0290** [Repealed, 24 SR 546]

**1555.0300** [Repealed, 24 SR 546]

**1555.0310** [Repealed, 24 SR 546]



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- 1555.0320 [Repealed, 24 SR 546]
- 1555.0330 [Repealed, 24 SR 546]
- 1555.0340 [Repealed, 24 SR 546]
- 1555.0350 [Repealed, 24 SR 546]
- 1555.0360 [Repealed, 24 SR 546]
- 1555.0370 [Repealed, 24 SR 546]
- 1555.0380 [Repealed, 24 SR 546]
- 1555.0390 [Repealed, 24 SR 546]
- 1555.0400 [Repealed, 24 SR 546]
- 1555.0410 [Repealed, 24 SR 546]
- 1555.0420 [Repealed, 24 SR 546]
- 1555.0430 [Repealed, 24 SR 546]
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- 1555.0460 [Repealed, 24 SR 546]
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- 1555.0480 [Repealed, 24 SR 546]
- 1555.0490 [Repealed, 24 SR 546]
- 1555.0500 [Repealed, 24 SR 546]
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- 1555.0520 [Repealed, 24 SR 546]
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- 1555.0560 [Repealed, 24 SR 546]
- 1555.0570 [Repealed, 24 SR 546]
- 1555.0580 [Repealed, 24 SR 546]
- 1555.0590 [Repealed, 24 SR 546]
- 1555.0600 [Repealed, 24 SR 546]
- 1555.0610 [Repealed, 24 SR 546]
- 1555.0620 [Repealed, 24 SR 546]
- 1555.0630 [Repealed, 24 SR 546]
- 1555.0640 [Repealed, 24 SR 546]

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- 1555.0650 [Repealed, 24 SR 546]
- 1555.0660 [Repealed, 24 SR 546]
- 1555.0670 [Repealed, 24 SR 546]
- 1555.0680 [Repealed, 24 SR 546]
- 1555.0690 [Repealed, 24 SR 546]
- 1555.0700 [Repealed, 24 SR 546]
- 1555.0710 [Repealed, 24 SR 546]
- 1555.0720 [Repealed, 24 SR 546]
- 1555.0730 [Repealed, 24 SR 546]
- 1555.0740 [Repealed, 24 SR 546]
- 1555.0750 [Repealed, 24 SR 546]
- 1555.0760 [Repealed, 24 SR 546]
- 1555.0770 [Repealed, 24 SR 546]
- 1555.0780 [Repealed, 24 SR 546]
- 1555.0790 [Repealed, 24 SR 546]
- 1555.0800 [Repealed, 24 SR 546]
- 1555.0810 [Repealed, 24 SR 546]
- 1555.0815 [Repealed, 24 SR 546]
- 1555.0820 [Repealed, 24 SR 546]
- 1555.0830 [Repealed, 24 SR 546]
- 1555.0840 [Repealed, 24 SR 546]
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- 1555.0870 [Repealed, 24 SR 546]
- 1555.0880 [Repealed, 24 SR 546]
- 1555.0885 [Repealed, 24 SR 546]
- 1555.0890 [Repealed, 24 SR 546]
- 1555.0900 [Repealed, 24 SR 546]
- 1555.0910 [Repealed, 24 SR 546]
- 1555.0920 [Repealed, 24 SR 546]
- 1555.0930 [Repealed, 24 SR 546]
- 1555.0940 [Repealed, 24 SR 546]
- 1555.0950 [Repealed, 24 SR 546]

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## FOOD DEFINITIONS AND STANDARDS

- 1555.0960 [Repealed, 24 SR 546]
- 1555.0970 [Repealed, 24 SR 546]
- 1555.0980 [Repealed, 24 SR 546]
- 1555.0990 [Repealed, 24 SR 546]
- 1555.1000 [Repealed, 24 SR 546]
- 1555.1010 [Repealed, 24 SR 546]
- 1555.1020 [Repealed, 24 SR 546]
- 1555.1030 [Repealed, 24 SR 546]
- 1555.1040 [Repealed, 24 SR 546]
- 1555.1050 [Repealed, 24 SR 546]
- 1555.1060 [Repealed, 24 SR 546]
- 1555.1070 [Repealed, 24 SR 546]
- 1555.1080 [Repealed, 24 SR 546]
- 1555.1090 [Repealed, 24 SR 546]
- 1555.1100 [Repealed, 24 SR 546]
- 1555.1110 [Repealed, 24 SR 546]
- 1555.1120 [Repealed, 24 SR 546]
- 1555.1130 [Repealed, 24 SR 546]
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- 1555.1175 [Repealed, 24 SR 546]
- 1555.1180 [Repealed, 24 SR 546]
- 1555.1190 [Repealed, 24 SR 546]
- 1555.1200 [Repealed, 24 SR 546]
- 1555.1210 [Repealed, 24 SR 546]
- 1555.1220 [Repealed, 24 SR 546]
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- 1555.1280** [Repealed, 24 SR 546]
- 1555.1290** [Repealed, 24 SR 546]
- 1555.1300** [Repealed, 24 SR 546]
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- 1555.1370** [Repealed, 24 SR 546]
- 1555.1380** [Repealed, 24 SR 546]
- 1555.1390** [Repealed, 24 SR 546]
- 1555.1400** [Repealed, 24 SR 546]
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- 1555.1470** [Repealed, 24 SR 546]
- 1555.1480** [Repealed, 24 SR 546]
- 1555.1490** [Repealed, 24 SR 546]
- 1555.1500** [Repealed, 24 SR 546]
- 1555.1510** [Repealed, 24 SR 546]
- 1555.1520** [Repealed, 24 SR 546]
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- 1555.1560** [Repealed, 24 SR 546]
- 1555.1570** [Repealed, 24 SR 546]
- 1555.1580** [Repealed, 24 SR 546]
- 1555.1590** [Repealed, 24 SR 546]
- 1555.1600** [Repealed, 24 SR 546]

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## FOOD DEFINITIONS AND STANDARDS

- 1555.1610 [Repealed, 24 SR 546]
- 1555.1620 [Repealed, 24 SR 546]
- 1555.1630 [Repealed, 24 SR 546]
- 1555.1640 [Repealed, 24 SR 546]
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- 1555.1670 [Repealed, 24 SR 546]
- 1555.1680 [Repealed, 24 SR 546]
- 1555.1690 [Repealed, 24 SR 546]
- 1555.1700 [Repealed, 24 SR 546]
- 1555.1710 [Repealed, 24 SR 546]
- 1555.1720 [Repealed, 24 SR 546]
- 1555.1730 [Repealed, 24 SR 546]
- 1555.1740 [Repealed, 24 SR 546]
- 1555.1750 [Repealed, 24 SR 546]
- 1555.1760 [Repealed, 24 SR 546]
- 1555.1770 [Repealed, 24 SR 546]
- 1555.1780 [Repealed, 24 SR 546]
- 1555.1790 [Repealed, 24 SR 546]
- 1555.1800 [Repealed, 24 SR 546]
- 1555.1805 [Repealed, 24 SR 546]
- 1555.1810 [Repealed, 24 SR 546]
- 1555.1820 [Repealed, 24 SR 546]
- 1555.1830 [Repealed, 24 SR 546]
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- 1555.1860 [Repealed, 24 SR 546]
- 1555.1870 [Repealed, 24 SR 546]
- 1555.1880 [Repealed, 24 SR 546]
- 1555.1890 [Repealed, 24 SR 546]
- 1555.1900 [Repealed, 24 SR 546]
- 1555.1910 [Repealed, 24 SR 546]
- 1555.1920 [Repealed, 24 SR 546]

- 1555.1930 [Repealed, 24 SR 546]
- 1555.1940 [Repealed, 24 SR 546]
- 1555.1950 [Repealed, 24 SR 546]
- 1555.1960 [Repealed, 24 SR 546]
- 1555.1965 [Repealed, 24 SR 546]
- 1555.1970 [Repealed, 24 SR 546]
- 1555.1980 [Repealed, 24 SR 546]
- 1555.1990 [Repealed, 24 SR 546]
- 1555.2000 [Repealed, 24 SR 546]
- 1555.2100 [Repealed, 24 SR 546]
- 1555.2110 [Repealed, 24 SR 546]
- 1555.2120 [Repealed, 24 SR 546]
- 1555.2130 [Repealed, 24 SR 546]
- 1555.2140 [Repealed, 24 SR 546]
- 1555.2150 [Repealed, 24 SR 546]
- 1555.2160 [Repealed, 24 SR 546]
- 1555.2170 [Repealed, 24 SR 546]
- 1555.2180 [Repealed, 24 SR 546]
- 1555.2190 [Repealed, 24 SR 546]
- 1555.2200 [Repealed, 24 SR 546]

**VEGETABLES AND RELATED PRODUCTS**

**1555.2205 VEGETABLES.**

“Vegetables” are the succulent, clean, sound edible parts of herbaceous plants used for culinary purposes.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2210 DRIED VEGETABLES.**

“Dried vegetables” are the clean, sound products made by drying properly matured and prepared vegetables in such a way as to take up no harmful substance and conform in name to the vegetables used in their preparation; “sun-dried vegetables” are dried vegetables made by drying without the use of artificial means; “evaporated vegetables” are dried vegetables made by drying with the use of artificial means.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2220 PICKLES.**

“Pickles” are the clean, sound, properly prepared cucumbers which may or may not have been subjected to fermentation and curing in salt brine, and which are safely and suitably preserved in an acetic or lactic acid solution to which may have been added other vegetables, spices, flavorings, salt, turmeric, natural sweeteners, or other food additives or natural or artificial color additives for food as provided for by the

federal Food, Drug and Cosmetic Act, as amended, and as specified in Code of Federal Regulations, title 21, part 121 and part 8, as revised, and in accordance with the state law. This definition does not include salt pickles as described in part 1555.2240.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2225 PICKLED VEGETABLES.**

“Pickled vegetables” are vegetables other than cucumbers prepared as described under part 1555.2220 and conform in name to the vegetable used.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2230 LABELING.**

The labels for such pickles and pickled vegetables, in addition to all other information required by Minnesota food law and rules, shall bear a list of ingredients in the descending order of predominance; provided, that spices, flavorings, and colorings may be designated as spices, flavorings, and colorings without naming each, and preservatives, if used, shall be listed by their common or usual names in one of the following qualifying statements: “\_\_\_\_\_ added as a preservative,” or “\_\_\_\_\_, a preservative,” or “preserved with \_\_\_\_\_,” the blank to contain the name of the preservative used.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2240 SALT PICKLES.**

Salt pickles are clean, sound, immature cucumbers, preserved in a solution of common salt, with or without spices.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2250 SWEET PICKLES.**

“Sweet pickles” are pickled cucumbers or other vegetables sweetened with sugar, dextrose, corn syrup, or corn syrup solids.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2260 SAUERKRAUT.**

“Sauerkraut” is the clean, sound product of characteristic acid flavor, obtained by the full fermentation, chiefly lactic, of properly prepared and shredded cabbage in the presence of not less than two percent nor more than three percent of salt. It contains upon completion of the fermentation not less than one percent of acid, expressed as lactic acid, to which may be added additional lactic acid, peppers, pickled vegetables, spices, flavorings, salt, and other food additives as provided by the federal Food, Drug and Cosmetic Act, as amended, and as specified in Code of Federal Regulations, title 21, part 121, as revised in accordance with the Administrative Procedure Act.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2270 LABELING.**

The label for sauerkraut, in addition to all other information required by Minnesota food law and rules, shall bear a list of ingredients in descending order of predominance; provided, that spices and flavorings may be designated as spices and flavorings without naming each, and preservatives, if used, shall be listed by their common or usual names in one of the following qualifying statements: “\_\_\_\_\_ added as a preservative,” or “\_\_\_\_\_, a preservative,” or “preserved with \_\_\_\_\_,” the blank to contain the name of the preservative used.

**Statutory Authority:** *MS s 31.10; 31.101*

## SUGAR AND RELATED PRODUCTS

**1555.2280 SUGAR.**

“Sugar” is the product chemically known as sucrose (saccharose), chiefly obtained from sugar cane, sugar beets, sorghum, maple, and palm.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2290 GRANULATED, LOAF, CUT, MILLED, AND POWDERED SUGARS.**

Granulated, loaf, cut, milled, and powdered sugars, are different forms of sugar and contain at least 99.5 percent sucrose.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2300 MAPLE SUGAR, MAPLE CONCRETE.**

“Maple sugar,” “maple concrete” is the solid product resulting from the evaporation of maple sap or maple syrup.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2310 MASSECUITE, MELADA, MUSH SUGAR, AND CONCRETE.**

“Massecuite,” “melada,” “mush sugar,” and “concrete” are products made by evaporating the purified juice of a sugar-producing plant or a solution of sugar to a solid or semisolid consistence and in which the sugar chiefly exists in a crystalline state.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2320 MOLASSES.**

“Molasses” is the product left after separating the sugar from massecuite, melada, mush sugar, or concrete and contains not more than 25 percent water and not more than five percent ash.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2330 REFINERS' SYRUP, TREACLE.**

“Refiners' syrup,” “treacle” is the residual liquid product obtained in the process of refining raw sugars and contains not more than 25 percent of water and not more than eight percent ash.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2340 SYRUP.**

“Syrup” is the sound product made by purifying and evaporating the juice of a sugar-producing plant without removing any of the sugar.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2350 SUGARCANE SYRUP.**

“Sugarcane syrup” is syrup made by the evaporation of the juice of the sugarcane or by the solution of sugarcane concrete and contains not more than 30 percent of water and not more than 2.5 percent ash.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2360 SORGHUM SYRUP.**

“Sorghum syrup” is the syrup obtained by the clarification and concentration of the juice of the sugar sorghum and contains not more than 30 percent water nor more than 6.25 percent ash calculated on a dry basis.

**Statutory Authority:** *MS s 31.10; 31.101*



**1555.2370 MAPLE SYRUP.**

"Maple syrup" is syrup made by the evaporation of maple sap or by the solution of maple concrete and contains not more than 35 percent water and weighs not less than 11 pounds to the gallon (231 cubic inches).

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2380 SUGAR SYRUP.**

"Sugar syrup" is the product made by dissolving sugar to the consistency of a syrup and contains not more than 35 percent water.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2390 DEXTROSE.**

"Dextrose" is a crystalline sugar made by hydrolyzing starch of a starch-containing substance until a greater part of the starch is converted into dextrose. The nondextrose materials are removed after crystallization. Dextrose appears in commerce in two forms, the anhydrous and hydrous. The former is crystallized without water of crystallization and contains not less than 99 percent dextrose and not more than .05 percent ash. The latter, crystallized with water of crystallization, contains not less than 90 percent dextrose and not more than .10 percent ash. The ash consists chiefly of sodium chloride.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2400 CORN SYRUP.**

"Corn syrup" is a viscous noncrystallizing solution produced by the partial hydrolysis of corn starch, the conversion being accomplished by the use of one of or a combination of acid, alkaline, or enzymatic catalysis. The degree of conversion is indicated by the percentage of reducing sugars calculated as dextrose on a solids basis and referred to as dextrose equivalent (D.E.). The D.E. of commercial corn syrup will range between 24 and 70. The moisture of corn syrup depends upon the dextrose equivalent and the degree of concentration. It is usually offered at concentrations of 41 to 46 degrees Baume, reported at 100 degrees Fahrenheit or it may be offered in a dry form under the name of corn syrup solids. Corn syrup is relatively free from color, odor, or flavor and contains not more than 0.50 percent ash.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2410 CANDY.**

"Candy" is a product made from a saccharine substance or substances, with or without the addition of harmless coloring, flavoring, or filling materials, and contains no terra alba, barytes, talc, chrome yellow, or other mineral substances or poisonous colors or flavors or other ingredients deleterious or detrimental to health or any vinous, malt, or spirituous liquor or compound or narcotic drug.

**Statutory Authority:** *MS s 31.10; 31.101*

**TEA AND COFFEE****1555.2420 TEA.**

"Tea" is the tender leaves, leaf buds, and tender internodes of different varieties of *thea sinensis* L., prepared and cured by recognized methods of manufacture. It conforms in variety and place of production to the name it bears; contains not less than four percent nor more than seven percent of ash; and meets the provisions of the Act of Congress approved March 2, 1897, as amended, regulating the importation and inspection of tea.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2430 COFFEE.**

"Coffee" is the seed of cultivated varieties of *Coffea arabica*, *C. liberica* and *C. robusta*. "Green coffee," "raw coffee," "unroasted coffee" is coffee freed from all but a

small portion of its spermoderm and conforms in variety and in place of production to the name it bears. "Roasted coffee," "coffee" is properly cleaned green coffee which by the action of heat (roasting) has become brown and has developed its characteristic aroma.

**Statutory Authority:** *MS s 31.10; 31.101*

**EDIBLE VEGETABLE OILS AND FATS****1555.2440 EDIBLE FATS AND EDIBLE OILS.**

"Edible fats" and "edible oils" are such glycerids of the fatty acids as are recognized to be wholesome foods. They are dry and sweet in flavor and odor.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2450 CACAO FAT, COCOA FAT.**

"Cacao fat," "cocoa fat" is edible fat obtained from sound cacao beans (seed of *Theobroma cacao* L. or other closely related species), either before or after roasting.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2460 COCONUT OIL, COPRA OIL.**

"Coconut oil," "copra oil" is the edible oil obtained from the kernels of the coconut (*Cocos mucifera* L. or *Coccoloba butyracea* L.).

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2470 COCHIN OIL.**

"Cochin oil" is coconut oil prepared in Cochin (Malabar).

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2480 CEYLON OIL.**

"Ceylon oil" is coconut oil prepared in Sri Lanka.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2490 CORN OIL, MAIZE OIL.**

"Corn oil," "maize oil" is the edible oil obtained from the germ of Indian corn, maize (*Zea mays* L.).

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2500 COTTONSEED OIL.**

"Cottonseed oil" is the edible oil obtained from the seed of the cotton plant (*Gossypium herbaceum* L.) or from the seed of other species of *Gossypium*.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2510 OLIVE OIL, SWEET OIL.**

"Olive oil," "sweet oil" is the edible oil obtained from the sound, mature fruit of the olive tree (*Olea europaea* L.).

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2520 PALM KERNEL OIL.**

"Palm kernel oil" is the edible oil obtained from the kernel of the fruit of the palm tree (*Elaeis guineensis* L. or *Elaeis melanococca* Gart).

**Statutory Authority:** *MS s 31.10; 31.101*

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FOOD DEFINITIONS AND STANDARDS 1555.2610

## 1555.2530 PEANUT OIL, ARACHIS OIL, EARTHNUIT OIL.

"Peanut oil," "arachis oil," "earthnut oil" is the edible oil obtained from the peanut (*Arachis hypogaea* L.).

**Statutory Authority:** *MS s 31.10; 31.101*

## 1555.2540 POPPY SEED OIL.

"Poppy seed oil" is the edible oil obtained from the seeds of the poppy (*Papaver somniferum* L.).

**Statutory Authority:** *MS s 31.10; 31.101*

## 1555.2550 RAPESEED OIL, RAPE OIL, COLZA OIL.

"Rapeseed oil," "rape oil," "colza oil" is the edible oil obtained from the seed of the rape plant (*Brassica napus* L.), or from the seed of closely related *Brassica* species, which yield oils similar in composition and character to the oil obtained from the seed of *Brassica napus* L.

**Statutory Authority:** *MS s 31.10; 31.101*

## 1555.2560 SOYBEAN OIL, SOY OIL, SOJA OIL.

"Soybean oil," "soy oil," "soja oil" is the edible oil obtained from the seed of the soybean plant (*Soja max.* (L.) Piper, *Glycine soja* Sieb, 7 Zucc.; -- *Soja hispida* Moench).

**Statutory Authority:** *MS s 31.10; 31.101*

## 1555.2570 SESAME OIL, GINGILLI OIL, TEEL OIL, BENNE OIL.

"Sesame oil," "gingilli oil," "teel oil," "benne oil" is the edible oil obtained from the seed of the sesame plant (*Sesamum indicum*, De. Candolle; *Sesamum radiatum*, Schum and Thonn; *Sesamum orientale* L.).

**Statutory Authority:** *MS s 31.10; 31.101*

## 1555.2580 SUNFLOWER OIL.

"Sunflower oil" is the edible oil obtained from the seed of the sunflower (*Helianthus annuus* L.).

**Statutory Authority:** *MS s 31.10; 31.101*

## SPICES AND CONDIMENTS

### 1555.2590 TERMS "DRIED" AND "STARCH."

As used in parts 1555.2590 to 1555.3180, the term "dried" refers to the air-dried product and the term "starch" refers to starch as determined by the official diastase method of the Association of Official Agricultural Chemists.

**Statutory Authority:** *MS s 31.10; 31.101*

### 1555.2600 SPICES.

Spices are aromatic vegetable substances used for the seasoning of food. They are clean, sound, and true to name and from them no portion of any volatile oil or other flavoring principle has been removed.

**Statutory Authority:** *MS s 31.10; 31.101*

### 1555.2610 ALLSPICE, PIMIENTO.

"Allspice," "pimiento" is the dried, nearly ripe fruit of *Pimenta officinalis* Lindl. It contains not less than eight percent of quercitannic acid (calculated from the total oxygen absorbed by the aqueous extract), not more than 25 percent of crude fiber, not

more than six percent of total ash, nor more than 0.4 percent of ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2620 ANISE, ANISEED.**

“Anise,” “aniseed” is the dried fruit of *Pimpinella anisum* L. It contains not more than nine percent of total ash nor more than 1.5 percent ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2630 BAY LEAVES.**

“Bay leaves” are the dried leaves of *Laurus nobilis* L.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2640 CAPERS.**

“Capers” are the flower buds of *Capparis spinosa* L.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2650 CARAWAY, CARAWAY SEED.**

“Caraway,” “caraway seed” is the dried fruit of *Carum carvi* L. It contains not more than eight percent of total ash nor more than 1.5 percent of ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2660 CARDAMON.**

“Cardamon” is the dried, nearly ripe fruit of *Elettaria cardamon* Maton.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2670 CARDAMON SEED.**

“Cardamon seed” is the dried seed of cardamon. It contains not more than eight percent total ash nor more than three percent of ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2680 RED PEPPER.**

“Red pepper” is the red, dried, ripe fruit of any species of *Capsicum*. It contains not more than eight percent of total ash nor more than one percent ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2690 CAYENNE PEPPER, CAYENNE.**

“Cayenne pepper,” “cayenne” is the dried, ripe fruit of *Capsicum frutescens* L., *Capsicum baccatum* L., or some other small-fruited species of *Capsicum*. It contains not less than 15 percent of nonvolatile ether extract, not more than 1.5 percent of starch, not more than 28 percent of crude fiber, not more than eight percent of total ash, nor more than 1.25 percent of ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2700 PAPRIKA.**

“Paprika” is the dried, ripe fruit of *Capsicum annum* L. It contains not more than 8.5 percent of total ash nor more than one percent of ash insoluble in hydrochloric acid. The iodine number of its extracted oil is not less than 125 nor more than 136.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2710 HUNGARIAN PAPRIKA.**

Subpart 1. **Hungarian paprika.** Hungarian paprika is paprika having the pungency and flavor characteristic of that grown in Hungary.

Subp. 2. **Rosenpaprika, rozsapaprika, rose paprika.** Rosenpaprika, rozsapaprika, rose paprika, is Hungarian paprika prepared by grinding specially selected pods of paprika, from which the placentae, stalks, and stems have been removed. It contains no more seeds than the normal pods, not more than 18 percent of nonvolatile ether extract, not more than 23 percent of crude fiber, not more than six percent of total ash nor more than 0.4 percent of ash insoluble in hydrochloric acid.

Subp. 3. **Koenigspaprika, king's paprika.** Koenigspaprika, king's paprika, is Hungarian paprika prepared by grinding whole pods of paprika without selection and includes the seeds and stems naturally occurring with the pods. It contains not more than 18 percent of nonvolatile ether extract, not more than 23 percent of crude fiber, not more than 6.5 percent of total ash, nor more than 0.5 percent of ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2720 PIMENTON, PIMIENTO, SPANISH PAPRIKA.**

Pimenton, pimiento, Spanish paprika, is paprika having the characteristics of that grown in Spain. It contains not more than 18 percent of nonvolatile ether extract, not more than 21 percent of crude fiber, not more than 8.5 percent of total ash, nor more than one percent ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2730 CELERY SEED.**

Celery seed is the dried fruit of *Celeri graveolens* (L.) Britton (*Apium graveolens* L.). It contains not more than ten percent of total ash nor more than two percent ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2740 CINNAMON.**

Cinnamon is the dried bark of cultivated varieties of *Cinnamomum zeylanicum* Nees or of *C. cassia* (L.) Blume, from which the outer layers may or may not have been removed.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2750 CEYLON CINNAMON.**

Ceylon cinnamon is the dried inner bark of cultivated varieties of *Cinnamomum zeylanicum* Nees.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2760 SAIGON CINNAMON, CASSIA.**

Saigon cinnamon, cassia, is the dried bark of cultivated varieties of *Cinnamomum cassia* (L.) Blume.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2770 GROUND CINNAMON, GROUND CASSIA.**

Ground cinnamon, ground cassia, is the powder made from cinnamon. It contains not more than five percent total ash nor more than two percent ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2780 CLOVES.**

Cloves are the dried flower buds of *Caryophyllus aromaticus* L. They contain not more than five percent of clove stems, not less than 15 percent of volatile ether extract, not less than 12 percent of quercitannic acid (calculated from the total oxygen absorbed by the aqueous extract), not more than ten percent of crude fiber, not more than seven percent of total ash, nor more than 0.5 percent ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2790 CORIANDER SEED.**

Coriander seed is the dried fruit of *Coriandrum savitum* L. It contains not more than seven percent of total ash nor more than 1.5 percent ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2800 CUMIN SEED.**

Cumin seed is the dried fruit of *Cuminum cyminum* L. It contains not more than 9.5 percent total ash, not more than 1.5 percent ash insoluble in hydrochloric acid, nor more than five percent of harmless foreign matter.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2810 CURCUMA, TURMERIC.**

Curcuma, turmeric, is the dried rhizome or bulbous roots of *Curcuma longa* L.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2820 DILL SEED.**

Dill seed is the dried fruit of *Anethum graveolens* L. It contains not more than ten percent total ash nor more than three percent ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2830 FENNEL SEED.**

Fennel seed is the dried fruit of cultivated varieties of *Foeniculum vulgare* Hill. It contains not more than nine percent total ash nor more than two percent ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2840 GINGER.**

Ginger is the washed and dried or decorticated and dried, rhizome of *Zingiber officinale* Roscoe. It contains not less than 42 percent of starch, not more than eight percent of crude fiber, not more than one percent of lime (CaO), not less than 12 percent of cold-water extract, not more than seven percent of total ash, not more than two percent of ash insoluble in hydrochloric acid, nor less than two percent of ash soluble in cold water.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2850 JAMAICA GINGER.**

Jamaica ginger is ginger grown in Jamaica. It contains not less than 15 percent of cold-water extract and conforms in other respects to the standards for ginger.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2860 LIMED GINGER, BLEACHED GINGER.**

Limed ginger, bleached ginger, is whole ginger coated with carbonate of calcium. It contains not more than four percent carbonate of calcium nor more than ten percent total ash and conforms in other respects to the standards for ginger.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2870 HORSERADISH.**

Horseradish is the root of *Radicula armoracia* (L.) Robinson.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2880 PREPARED HORSERADISH.**

Prepared horseradish is comminuted horseradish, with or without a vinegar.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2890 MACE.**

Mace is the dried arillus of *Myristica fragrans* Houtt. It contains not less than 20 percent nor more than 30 percent nonvolatile ether extract and not more than ten percent crude fiber, not more than three percent total ash, nor more than 0.5 percent ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2900 MACASSAR MACE, PAPUA MACE.**

Macassar mace, papua mace, is the dried arillus of *Myristica argentea* Warb.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.2910 MARJORAM, LEAF MARJORAM.**

Marjoram, leaf marjoram, is the dried leaves with or without a small proportion of the flowering tops, of the *Majorana Hortensis* Moench. It contains not more than 16 percent total ash, not more than 4.5 percent ash insoluble in hydrochloric acid, nor more than ten percent stems and harmless foreign material.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3000 MUSTARD SEED.**

Subpart 1. **Mustard seed.** Mustard seed is the seed of *Sinapis alba* L. (white mustard), *Brassica nigra* (L.) Koch (black mustard), *B. Juncea* (L.) Cosson, or varieties or closely related species of the types of *B. nigra* and *B. juncea*.

Subp. 2. **White mustard.** *Sinapis alba* (white mustard) contains no appreciable amount of volatile oil. It contains not more than five percent of total ash nor more than 1.5 percent ash insoluble in hydrochloric acid.

Subp. 3. **Black mustard.** *Brassica nigra* (black mustard) and *B. juncea* yield 0.6 percent of volatile mustard oil (calculated as allylisothiocyanate). The varieties and species closely related to the types of *B. nigra* and *B. juncea* yield not less than 0.6 percent of volatile mustard oil, similar in character and composition to the volatile oils yielded by *B. nigra* and *B. juncea*. These mustard seeds contain not more than five percent of total ash nor more than 1.5 percent ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3010 GROUND MUSTARD SEED, MUSTARD MEAL.**

“Ground mustard seed,” “mustard meal” is the unbolted, ground mustard seed and conforms to the standards for mustard seed.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3020 MUSTARD CAKE.**

Mustard cake is ground mustard seed, mustard meal, from which a portion of the fixed oil has been removed.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3030 MUSTARD FLOUR, GROUND MUSTARD, MUSTARD.**

“Mustard flour,” “ground mustard,” “mustard” is the powder made from mustard seed with the hulls largely removed and with or without the removal of a portion of the fixed oil. It contains not more than 1.5 percent starch, nor more than six percent total ash.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3040 PREPARED MUSTARD.**

“Prepared mustard” is a paste composed of a mixture of ground mustard seed and/or mustard flour and/or mustard cake, with salt, a vinegar, and with or without sugar and/or dextrose, spices, or other condiments. In the fat, salt, and sugar free solids it contains not more than 24 percent carbohydrates, not more than 12 percent crude fiber nor less than 5.6 percent nitrogen, the carbohydrates being calculated as starch.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3050 NUTMEG.**

“Nutmeg” is the dried seed of *Myristica fragrans* Houtt, deprived of its testa, with or without a thin coating of lime (CaO). It contains not less than 25 percent nonvolatile ether extract, not more than ten percent of crude fiber, not more than five percent total ash, nor more than 0.5 percent ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3060 MACASSAR NUTMEG, PAPUA NUTMEG, MALE NUTMEG, LONG NUTMEG.**

“Macassar nutmeg,” “papua nutmeg,” “male nutmeg,” “long nutmeg” is the dried seed of *Myristica argentea* Warb., deprived of its testa.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3070 PARADISE SEED, GRAINS OF PARADISE, GUINEA GRAINS, MELEGUETA PEPPER.**

“Paradise seed,” “grains of paradise,” “Guinea grains,” “melegueta pepper” is the seed of *Amomum melegueta* Roscoe.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3080 PARSLEY LEAVES.**

“Parsley leaves” are the leaves of *Petroselinum hortense* Hoffm. (*P. sativum* Hoffm.)

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3090 BLACK PEPPER.**

“Black pepper” is the dried immature berry of *Piper nigrum* L. It contains not less than 6.75 percent nonvolatile ether extract, not less than 30 percent starch, not more than seven percent total ash nor more than 1.5 percent ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3100 GROUND BLACK PEPPER.**

“Ground black pepper” is the product made by grinding the entire berry of *Piper nigrum* L. It contains the several parts of the berry in their normal proportions.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3110 LONG PEPPER.**

“Long pepper” is the dried fruit of *Piper longum* L.

**Statutory Authority:** *MS s 31.10; 31.101*



**1555.3120 WHITE PEPPER.**

“White pepper” is the dried mature berry of *Piper nigrum* L. from which the outer coating or the outer and inner coatings have been removed. It contains not less than seven percent nonvolatile ether extract, not less than 52 percent starch, not more than five percent crude fiber, not more than 3.5 percent total ash, nor more than 0.3 percent ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3130 SAFFRON.**

“Saffron” is the dried stigma of *Crocus sativus* L. It contains not more than ten percent of yellow styles and other foreign matter, not more than 14 percent volatile matter when dried at 100 degrees Celsius, not more than 7.5 percent total ash, nor more than one percent ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3140 SAGE.**

“Sage” is the dried leaf of *Salvia Officinalis* L. It contains not more than 12 percent stems (excluding petioles) and other foreign material.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3150 SAVORY, SUMMER SAVORY.**

“Savory,” “summer savory” is the dried leaf and flowering tops of *Satureja hortensis* L.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3160 STAR ANISEED.**

“Star aniseed” is the dried fruit of *Illicium verum* Hook. It contains not more than five percent total ash.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3170 TARRAGON.**

“Tarragon” is the dried leaves and flowering tops of *Artemisia dracunculus* L.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3180 THYME.**

“Thyme” is the dried leaves and flowering tops of *Thymus vulgaris* L. It contains not more than 14 percent total ash nor more than four percent ash insoluble in hydrochloric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**FLAVORING EXTRACTS AND RELATED PRODUCTS****1555.3190 FLAVORING EXTRACT.**

“A flavoring extract” is a solution in which the primary solvent is ethyl alcohol of proper strength of the sapid and odorous principles of the fruit or plant with or without its coloring matter or added color and conforms in name to the fruit or plant used in its preparation.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3200 ALMOND EXTRACT.**

“Almond extract” is the flavoring extract prepared from oil of bitter almonds, free from hydrocyanic acid and contains not less than one percent by volume of oil of bitter almonds.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3210 OIL OF BITTER ALMONDS, COMMERCIAL.**

“Oil of bitter almonds, commercial,” is the volatile oil obtained from the seed of the bitter almond (*Amygdalus communis* L.), the apricot (*Prunus armeniaca* L.) or the peach (*Amygdalus persica* L.).

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3220 ANISE EXTRACT.**

“Anise extract” is the flavoring extract prepared from oil of anise, and contains not less than three percent volume of oil of anise.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3230 OIL OF ANISE.**

Oil of anise is the volatile oil obtained from the anise seed.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3240 CELERY SEED EXTRACT.**

“Celery seed extract” is the flavoring extract prepared from celery seed or the oil of celery seed or both and contains not less than 0.3 percent by volume oil of celery seed.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3250 OIL OF CELERY SEED.**

“Oil of celery seed” is the volatile oil obtained from celery seed.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3260 CINNAMON EXTRACT, CASSIA EXTRACT, CASSIA CINNAMON EXTRACT.**

“Cinnamon extract,” “cassia extract,” “cassia cinnamon extract” is the flavoring product prepared from oil of cinnamon and contains not less than two percent by volume of oil of cinnamon.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3270 OIL OF CINNAMON, OIL OF CASSIA, OIL OF CASSIA CINNAMON.**

“Oil of cinnamon,” “oil of cassia,” “oil of cassia cinnamon” is the lead-free volatile oil obtained from the leaves or bark of *Cinnamomum cassia* (L.) Blume and contains not less than 80 percent by volume of cinnamic aldehyde.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3280 CEYLON CINNAMON EXTRACT.**

“Ceylon cinnamon extract” is the flavoring extract prepared from oil of Ceylon cinnamon and contains not less than two percent by volume of oil of Ceylon cinnamon.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3290 OIL OF CEYLON CINNAMON.**

“Oil of Ceylon cinnamon” is the lead-free volatile oil obtained from the bark of the Ceylon cinnamon (*Cinnamomum zeylanicum* Nees) and contains not less than 65 percent by weight of cinnamic aldehyde and not more than ten percent by weight of eugenol.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3300 CLOVE EXTRACT.**

“Clove extract” is the flavoring extract prepared from oil of cloves and contains not less than two percent by volume of oil of cloves.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3310 OIL OF CLOVES.**

“Oil of cloves” is the lead-free volatile oil obtained from cloves.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3320 GINGER EXTRACT.**

“Ginger extract” is the flavoring extract prepared from ginger and contains in each 100 cubic centimeters the alcohol-soluble matters from not less than 20 grams ginger.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3330 LEMON EXTRACT.**

“Lemon extract” is the flavoring extract prepared from oil of lemon, from lemon peel, or both, and contains not less than five percent by volume oil of lemon.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3340 OIL OF LEMON.**

“Oil of lemon” is the volatile oil expressed, without the aid of heat, from the fresh peel of the lemon (*Citrus limonia* Osbeck) with or without previous separation of the pulp and peel.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3350 TERPENELESS EXTRACT OF LEMON.**

“Terpeneless extract of lemon” is the flavoring extract prepared by shaking oil of lemon with dilute alcohol or by dissolving terpeneless oil of lemon in dilute alcohol, and contains not less than 0.2 percent by weight of citral derived from oil of lemon.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3360 TERPENELESS OIL OF LEMON.**

“Terpeneless oil of lemon” is oil of lemon from which all or nearly all of the terpenes have been removed.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3370 NUTMEG EXTRACT.**

“Nutmeg extract” is the flavoring extract prepared from oil of nutmeg and contains not less than two percent by volume of oil of nutmeg.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3380 OIL OF NUTMEG.**

“Oil of nutmeg” is the volatile oil obtained from nutmegs.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3390 ORANGE EXTRACT.**

“Orange extract” is the flavoring extract prepared from oil of orange or from orange peel or both and contains not less than five percent by volume of oil of orange.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3400 OIL OF ORANGE.**

“Oil of orange” is the volatile oil obtained by expression or alcoholic solution from the fresh peel of the orange (*Citrus aurantium* L.) and has an optical rotation (25 degrees Celsius) of not less than +95 degrees in a 100-millimeter tube.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3410 TERPENELESS EXTRACT OF ORANGE.**

“Terpeneless extract of orange” is the flavoring extract prepared by shaking oil of orange with dilute alcohol or by dissolving terpeneless oil of orange in dilute alcohol, and corresponds in flavoring strength to orange extract.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3420 TERPENELESS OIL OF ORANGE.**

“Terpeneless oil of orange” is oil of orange from which all or nearly all of the terpenes have been removed.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3430 PEPPERMINT EXTRACT.**

“Peppermint extract” is the flavoring extract prepared from oil of peppermint or from peppermint or both and contains not less than three percent by volume of oil of peppermint.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3440 PEPPERMINT.**

“Peppermint” is the leaves and flowering tops of *Mentha piperita* L.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3450 OIL OF PEPPERMINT.**

“Oil of peppermint” is the volatile oil obtained from peppermint and contains not less than 50 percent by weight of menthol.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3460 ROSE EXTRACT.**

“Rose extract” is the flavoring extract prepared from attar of roses with or without red rose petals and contains not less than 0.4 percent by volume of attar of roses.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3470 ATTAR OF ROSES.**

“Attar of roses” is the volatile oil obtained from the petals of *Rosa Damascena* Mill., *R. Centifolia* L. or *R. Moschata* Herrm.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3480 SAVORY EXTRACT.**

“Savory extract” is the flavoring extract prepared from oil of savory or from savory or both and contains not less than 0.35 percent by volume of oil of savory.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3490 OIL OF SAVORY.**

“Oil of savory” is the volatile oil obtained from savory.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3500 SPEARMINT EXTRACT.**

"Spearmint extract" is the flavoring extract prepared from oil of spearmint or from spearmint or both and contains not less than three percent by volume of oil of spearmint.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3510 SPEARMINT.**

"Spearmint" is the leaves and flowering tops of *Mentha spicata* L.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3520 OIL OF SPEARMINT.**

"Oil of spearmint" is the volatile oil obtained from spearmint.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3530 STAR ANISE EXTRACT.**

"Star anise extract" is the flavoring extract prepared from oil of star anise and contains not less than three percent by volume of oil of star anise.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3540 OIL OF STAR ANISE.**

"Oil of star anise" is the volatile oil distilled from the fruit of the star anise (*Illicium verum* Hook).

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3550 SWEET BASIL EXTRACT.**

"Sweet basil extract" is the flavoring extract prepared from oil of sweet basil or from sweet basil or both and contains not less than 0.1 percent by volume of oil of sweet basil.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3560 SWEET BASIL; OIL OF SWEET BASIL.**

"Sweet basil" is the leaves and tops of *Ocimum basilicum* L. "Oil of sweet basil" is the volatile oil obtained from basil.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3570 SWEET MARJORAM EXTRACT, MARJORAM EXTRACT.**

"Sweet marjoram extract," "marjoram extract," is the flavoring extract prepared from the oil of marjoram or from marjoram or both and contains not less than one percent by volume of oil of marjoram.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3580 OIL OF MARJORAM.**

"Oil of marjoram" is the volatile oil obtained from marjoram.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3590 THYME EXTRACT; OIL OF THYME.**

"Thyme extract" is the flavoring extract prepared from oil of thyme or from thyme or both and contains not less than 0.2 percent by volume of oil of thyme. "Oil of thyme" is the volatile oil obtained from thyme.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3600 TONKA EXTRACT.**

“Tonka extract” is the flavoring extract prepared from tonka bean with or without one or more of the following: sugar, dextrose, glycerin. It contains not less than 0.1 percent by weight of coumarin extracted from the tonka bean, together with a corresponding proportion of the other soluble matters thereof.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3610 TONKA BEAN.**

“Tonka bean” is the seed of *Coumarouna odorata* Aublet (*Ditperyx odorata* Aubl.) Willd.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3620 WINTERGREEN EXTRACT.**

“Wintergreen extract” is the flavoring extract prepared from oil of wintergreen and contains not less than three percent by volume of oil of wintergreen.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3630 OIL OF WINTERGREEN.**

“Oil of wintergreen” is the volatile oil distilled from the leaves of the *Gaultheria procumbens* L.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3640 EXTRACT AND FLAVOR.**

The term “extract” is applicable only to substances for food flavoring purposes where the primary solvent is alcohol of proper strength and contains the same kinds and proportions of active flavoring ingredients required by the definitions and standards for extracts. The term “flavor” is applicable only to flavoring products prepared with solvents other than alcohol and shall be labeled “flavor” provided they contain the same kinds and proportions of active flavoring ingredients as are required by the definitions and standards for extracts.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3650 DEFINITIONS.**

Subpart 1. **Vanilla beans.** The term “vanilla beans” means the properly cured and dried fruit pods of *Vanilla planifolia* Andrews and of *Vanilla tahitensis* Moore.

Subp. 2. **Unit weight of vanilla beans.** The term “unit weight of vanilla beans” means, in the case of vanilla beans containing not more than 25 percent moisture, 13.35 ounces of such beans; and, in the case of vanilla beans containing more than 25 percent moisture, it means the weight of such beans equivalent in content of moisture-free vanilla-bean solids to 13.35 ounces of vanilla beans containing 25 percent moisture. For example, one unit weight of vanilla beans containing 33.25 percent moisture amounts to 15 ounces. The moisture content of vanilla beans is determined by the method prescribed in Official Methods of Analysis of the Association of Official Agricultural Chemists, ninth edition, 1960, sections 22.004 and 22.005, except that the toluene used is blended with 20 percent by volume of benzene and the total distillation time is four hours. To prepare samples for analysis, the pods are chopped into pieces approximately one-fourth inch longest dimension, using care to avoid moisture change.

Subp. 3. **Unit of vanilla constituent.** The term “unit of vanilla constituent” means the total sapid and odorous principles extractable from one unit weight of vanilla beans, as defined in subpart 2, by an aqueous alcohol solution in which the content of ethyl alcohol by volume amounts to not less than 35 percent.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3660 VANILLA EXTRACT.**

Vanilla extract is the solution in aqueous ethyl alcohol of the sapid and odorous principles extractable from vanilla beans. In vanilla extract the content of ethyl alcohol is not less than 35 percent by volume and the content of vanilla constituent, as defined in part 1555.3650, subpart 3, is not less than one unit per gallon. The vanilla constituent may be extracted directly from vanilla beans or it may be added in the form of concentrated vanilla extract or concentrated vanilla flavoring or vanilla flavoring concentrated to the semisolid form called vanilla oleoresin. Vanilla extract may contain one or more of the following optional ingredients: glycerin; propylene glycol; sugar (including invert sugar); dextrose; corn syrup (including dried corn syrup).

The specified name of the food is "vanilla extract" or "extract of vanilla."

**Statutory Authority:** *Ms s 31.10; 31.101*

**1555.3680 LABEL STATEMENTS.**

When the vanilla extract is made in whole or in part by dilution of vanilla oleoresin, concentrated vanilla extract, or concentrated vanilla flavoring, the label shall bear the statement "made from \_\_\_\_\_" or "made in part from \_\_\_\_\_," the blank being filled in with the name or names "vanilla oleoresin," "concentrated vanilla extract," or "concentrated vanilla flavoring," as appropriate. If the article contains two or more units of vanilla constituent, the name of the food shall include the designation "\_\_\_\_\_ fold," the blank being filled in with the whole number (disregarding fractions) expressing the number of units of vanilla constituent per gallon of the article.

Wherever the name of the food appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the labeling required by this part shall immediately and conspicuously precede or follow such name, without intervening written, printed, or graphic matter.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3700 CONCENTRATED VANILLA EXTRACT.**

Concentrated vanilla extract conforms to the definition and standard of identity and is subject to any requirement for label statement of optional ingredients prescribed for vanilla extract by parts 1555.3660 to 1555.3680, except that it is concentrated to remove part of the solvent, and each gallon contains two or more units of vanilla constituent as defined in part 1555.3650, subpart 3. The content of ethyl alcohol is not less than 35 percent by volume.

The specified name of the food is "concentrated vanilla extract \_\_\_\_\_fold" or "\_\_\_\_\_fold concentrated vanilla extract," the blank being filled in with the whole number (disregarding fractions) expressing the number of units of vanilla constituent per gallon of the article. For example, "concentrated vanilla extract twofold."

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3720 VANILLA FLAVORING.**

Vanilla flavoring conforms to the definition and standard of identity and is subject to any requirement for label statement of optional ingredients prescribed for vanilla extract by parts 1555.3660 to 1555.3680, except that its content of ethyl alcohol is less than 35 percent by volume. The specified name of the food is "vanilla flavoring."

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3730 CONCENTRATED VANILLA FLAVORING.**

Concentrated vanilla flavoring conforms to the definition and standard of identity and is subject to any requirement for label statement of optional ingredients prescribed for vanilla flavoring by part 1555.3720, except that it is concentrated to remove part of the solvent, and each gallon contains two or more units of vanilla constituents as defined in part 1555.3650, subpart 3.

The specified name of the food is "concentrated vanilla flavoring \_\_\_\_\_fold" or "\_\_\_\_\_fold concentrated vanilla flavoring," the blank being filled in with the whole number (disregarding fractions) expressing the number of units of vanilla constituent per gallon of the article. For example, "concentrated vanilla flavoring threefold."

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.3750 VANILLA-VANILLIN EXTRACT.

Vanilla-vanillin extract conforms to the definition and standard of identity and is subject to any requirement for label statement of optional ingredients prescribed for vanilla extract by parts 1555.3660 to 1555.3680, except that for each unit of vanilla constituent, as defined in part 1555.3650, subpart 3, contained therein, the article also contains not more than one ounce of added vanillin.

The specified name of the food is "vanilla-vanillin extract \_\_\_\_\_fold" or "\_\_\_\_\_fold vanilla-vanillin extract," followed immediately by the statement "contains vanillin, an artificial flavor (or flavoring)." The blank in the name is filled in with the whole number (disregarding fractions) expressing the sum of the number of units of vanilla constituent plus the number of ounces of added vanillin per gallon of the article. However, if the strength of the article is less than twofold, the term "\_\_\_\_\_fold" is omitted from the name.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.3770 VANILLA-VANILLIN FLAVORING.

Vanilla-vanillin flavoring conforms to the definition and standard of identity and is subject to any requirement for label statement of optional ingredients prescribed for vanilla-vanillin extract by part 1555.3750, except that its content of ethyl alcohol is less than 35 percent by volume.

The specified name of the food is "vanilla-vanillin flavoring \_\_\_\_\_ fold" or "\_\_\_\_\_ fold vanilla-vanillin flavoring," followed immediately by the statement "contains vanillin, an artificial flavor (or flavoring)." The blank in the name is filled in with the whole number (disregarding fractions) expressing the sum of the number of units of vanilla constituent plus the number of ounces of added vanillin per gallon of the article. However, if the strength of the article is less than twofold, the term "\_\_\_\_\_ fold" is omitted from the name.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.3780 VANILLA POWDER.

Vanilla powder is a mixture of ground vanilla beans or vanilla oleoresin or both, with one or more of the following optional blending ingredients: sugar; dextrose; lactose; food starch including food starch-modified; dried corn syrup. Vanilla powder may contain one or any mixture of two or more of the anticaking ingredients specified in part 1555.3790, but the total weight of any such ingredient or mixture is not more than two percent of the weight of the finished vanilla powder. Vanilla powder contains in each eight pounds not less than one unit of vanilla constituent, as defined in part 1555.3650, subpart 3.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.3790 ANTICAKING INGREDIENTS.

The anticaking ingredients referred to in part 1555.3780 are: aluminum calcium silicate, calcium silicate, calcium stearate, magnesium silicate, and tricalcium phosphate.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.3800 NAME.

The specified name of the food is "vanilla powder \_\_\_\_\_fold" or "\_\_\_\_\_fold vanilla powder," except that if sugar is the optional blending ingredient used, the word "sugar" may replace the word "powder." The blank in the name is filled in with



the whole number (disregarding fractions) expressing the number of units of vanilla constituent per eight pounds of the article. However, if the strength of the article is less than twofold, the term "\_\_\_\_\_fold" is omitted from the name.

The label of vanilla powder shall bear the common names of any of the optional ingredients specified in parts 1555.3780 and 1555.3790 that are used, except that where the alternative name "vanilla sugar" is used for designating the food, it is not required that sugar be named as an optional ingredient.

Wherever the name of the food appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the labeling required by this part shall immediately and conspicuously precede or follow such name, without intervening written, printed, or graphic matter.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.3830 VANILLA-VANILLIN POWDER.**

Vanilla-vanillin powder conforms to the definition and standard of identity and is subject to any requirement for label statement of optional ingredients prescribed for vanilla powder by parts 1555.3780 to 1555.3800, except that for each unit of vanilla constituent as defined in part 1555.3650, subpart 3 contained therein, the article also contains not more than one ounce of added vanillin.

The specified name of the food is "vanilla-vanillin powder \_\_\_\_\_fold" or "\_\_\_\_\_fold vanilla-vanillin powder," followed immediately by the statement "contains vanillin, an artificial flavor (or flavoring)." If sugar is the optional blending ingredient used, the word "sugar" may replace the word "powder" in the name. The blank in the name is filled in with the whole number (disregarding fractions) expressing the sum of the number of units of vanilla constituent plus the number of ounces added vanillin per eight pounds of the article. However, if the strength of the article is less than twofold, the term "\_\_\_\_\_fold" is omitted from the name.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.3850 IMITATIONS, FANCIFUL NAMES.**

Extracts and flavors which contain harmless artificial or synthetic compounds made to resemble the flavors of natural fruit or plant products shall be labeled with the word "imitation" printed as a part of the name of the product and in type of the same size and color as the word designating the fruit or plant, and the label shall bear no statement, design, or device whereby the purchaser may be misled into believing that the product is prepared from natural fruit or plant.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.3860 LABEL STATEMENT.**

A food for which no standard of identity is established and which contains harmless artificial or synthetic compounds made to resemble the flavors of natural fruit or plant regardless of the type of solvent used, shall be labeled "imitation \_\_\_\_\_ flavor." The blank being filled in with the name of the fruit or plant flavor imitated.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.3870 FANCIFUL TRADE NAMES OR COINED NAMES.**

Fanciful trade names or coined names applied to imitation extracts and flavors must not simulate the names of genuine products and must be incapable of producing a false or misleading impression in the mind of the consumer. Such fanciful or coined names must furthermore be followed by comparably conspicuous declarations that the products are imitations, together with the other information required by law, rules, or regulations.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3880 IMITATION VANILLA EXTRACT OR IMITATION VANILLA FLAVOR.**

An extract or flavor, consisting of a solution of vanillin, ethyl vanillin or heliotropin or mixture of any two or more, with or without added color or any other ingredient, which imitates a vanilla extract or a nonalcoholic vanilla flavor, shall be plainly labeled "imitation vanilla extract" or "imitation vanilla flavor" as the case may be and the ingredients which give the product its characteristics as an imitation shall be plainly declared on the label. Imitation extracts and flavors shall have a minimum flavoring strength not less than that produced by 0.7 percent solution of vanillin. Ethyl vanillin, when substituted for vanillin, is considered three times as strong and heliotropin two times as strong as vanillin in flavoring strength. Vanilla extract should not be listed as an ingredient of an imitation vanilla extract unless it contains at least five percent by volume of pure vanilla extract in a minimum strength product. Distinctive or fanciful names, all other rules or regulations notwithstanding, shall not be used as descriptive of these imitation products.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3890 EXTRACT OF VANILLA AND TONKA OR EXTRACT OF TONKA AND VANILLA.**

An extract or flavor which consists of a mixture of extract of vanilla bean and extract of tonka bean shall be labeled "extract of vanilla and tonka" or "extract of tonka and vanilla" as the case may be, the names of the flavoring ingredients being given in the order of their predominance.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3900 SUCH TERMS AS "DOUBLE" AND "TRIPLE."**

The terms "double," "triple," etc., when applied to extracts and flavors, are held to mean respectively two and three times the minimum standard strength.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3910 TERM "CONCENTRATED."**

The term "concentrated" as applied to extracts and flavors is false and misleading unless accompanied by a plain statement as to the degree of concentration in terms of the standard product.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3920 STRENGTH OF EXTRACT OR FLAVOR.**

An extract or flavor whether it be an imitation sold under its own name or designated by a coined name and intended to be used in lieu of the extract or flavor imitated shall be of the strength of the product imitated.

**Statutory Authority:** *MS s 31.10; 31.101*

**VINEGARS****1555.3930 VINEGAR, CIDER VINEGAR, APPLE VINEGAR.**

"Vinegar," "cider vinegar," "apple vinegar," is the product made by the alcoholic and subsequent acetous fermentations of the juice of apples and contains in 100 cubic centimeters (20 degrees Celsius) not less than four grams of acetic acid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.3940 WINE VINEGAR, GRAPE VINEGAR.**

"Wine vinegar," "grape vinegar," is the product made by the alcoholic and subsequent acetous fermentations of the juice of grapes and contains, in 100 cubic centimeters (20 degrees Celsius), not less than four grams of acetic acid.

**Statutory Authority:** *MS s 31.10; 31.101*

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FOOD DEFINITIONS AND STANDARDS 1555.4100

## 1555.3950 MALT VINEGAR.

“Malt vinegar” is the product made by the alcoholic and subsequent acetous fermentations, without distillation, of an infusion of barley malt or cereals whose starch has been converted by malt and contains, in 100 cubic centimeters (20 degrees Celsius), not less than four grams of acetic acid.

**Statutory Authority:** *MS s 31.10; 31.101*

## 1555.3960 SUGAR VINEGAR.

“Sugar vinegar” is the product made by the alcoholic and subsequent acetous fermentations of solutions of sugar, syrup, molasses, or refiners’ syrup and contains, in 100 cubic centimeters (20 degrees Celsius), not less than four grams of acetic acid.

**Statutory Authority:** *MS s 31.10; 31.101*

## 1555.3970 GLUCOSE VINEGAR.

“Glucose vinegar” is the product made by the alcoholic and subsequent acetous fermentations of a solution of glucose, is dextrorotatory and contains, in 100 cubic centimeters (20 degrees Celsius), not less than four grams of acetic acid.

**Statutory Authority:** *MS s 31.10; 31.101*

## 1555.3980 SPIRIT VINEGAR, DISTILLED VINEGAR, GRAIN VINEGAR.

“Spirit vinegar,” “distilled vinegar,” “grain vinegar,” is the product made by the acetous fermentation of dilute distilled alcohol and contains, in 100 cubic centimeters (20 degrees Celsius), not less than four grams of acetic acid.

**Statutory Authority:** *MS s 31.10; 31.101*

## ALMOND PASTES AND KERNEL PASTES

### 1555.3990 ALMOND PASTE.

“Almond paste” is the plastic product obtained by cooking blanched and ground sweet almonds with blanched and ground bitter almonds, water, sugar, and/or dextrose. It contains not more than 14 percent of water nor more than 40 percent total sugars expressed as invert sugar.

**Statutory Authority:** *MS s 31.10; 31.101*

### 1555.4000 KERNEL PASTES.

“Kernel pastes” are the plastic products obtained by cooking, with water, sugar, and/or dextrose, the blanched and ground kernels of one or more of the following: apricots, peaches, plums (prunes). They are free from hydrocyanic acid and contain not more than 14 percent of water nor more than 40 percent of total sugars expressed as invert sugar. A kernel paste conforms in name to the kind or kinds of kernels employed in its production.

**Statutory Authority:** *MS s 31.10; 31.101*

## BAKING POWDER

### 1555.4100 BAKING POWDER.

Baking powder is the leavening agent produced by the mixing of an acid-reacting material and sodium bicarbonate, with or without starch or flour. It yields not less than 12 percent of available carbon dioxide. The acid-reacting materials in baking powder are tartaric acid or its acid salts, acid salts of phosphoric acid, compounds of aluminum, or any combination in substantial proportions of the foregoing.

**Statutory Authority:** *MS s 31.10; 31.101*

## SALT

**1555.4110 TABLE SALT, DAIRY SALT.**

“Table salt,” “dairy salt” is fine-grained crystalline salt containing, on a water-free basis, not more than 1.4 percent of calcium sulfate ( $\text{CaSO}_4$ ) nor more than 0.5 percent of calcium and magnesium chloride ( $\text{CaCl}_2$  and  $\text{MgCl}_2$ ) nor more than 0.1 percent of matters insoluble in water.

**Statutory Authority:** *MS s 31.10; 31.101*

## NONALCOHOLIC BEVERAGES

**1555.4120 SODA WATER.**

“Soda water” is the class of beverages made by absorbing carbon dioxide in potable water. The amount of carbon dioxide used is not less than that which will be absorbed by the beverage at a pressure of one atmosphere and at a temperature of 60 degrees Fahrenheit. It may contain buffering agents as provided in part 1555.4130, item E. It either contains no alcohol or only such alcohol (not in excess of 0.5 percent by weight of the finished beverage) as is contributed by the flavoring ingredient used. Soda water designated by a name including any proprietary name provided for in part 1555.4140 which includes the word “cola” or a designation as a “pepper” beverage that for years has become well known as being made with kola nut extract and/or other natural caffeine-containing extracts and thus as a caffeine-containing beverage shall contain caffeine in a quantity not to exceed 0.02 percent by weight.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4130 OPTIONAL INGREDIENTS.**

Soda water may contain optional ingredients but if any such ingredient is a food additive or a color additive within the meaning of section 201 (s) or (t) of the Federal Food, Drug and Cosmetic Act, it is used only in conformity with the requirements established therefore. The optional ingredients that may be used in soda water in such proportions as are reasonably required to accomplish their intended effects are:

A. nutritive sweeteners consisting of the dry or liquid form of sugar, invert sugar, dextrose, corn syrup, glucose syrup, sorbitol, or any combination of two or more of these;

B. one or more of the following flavoring ingredients may be added in a carrier consisting of ethyl alcohol, glycerin, or propylene glycol:

(1) fruit juices (including concentrated fruit juices), natural flavoring derived from fruits, vegetables, bark, buds, roots, leaves, and similar plant materials; or  
(2) artificial flavoring;

C. natural and artificial color additives;

D. one or more of the acidifying agents acetic acid, adipic acid, citric acid, fumaric acid, lactic acid, malic acid, phosphoric acid, or tartaric acid;

E. one or more of the buffering agents consisting of the acetate, bicarbonate, carbonate, chloride, citrate, lactate, orthophosphate, or sulfate salts of calcium, magnesium, potassium, or sodium;

F. emulsifying, stabilizing, or viscosity-producing agents:

(1) one or more of the emulsifying, stabilizing, or viscosity-producing agents brominated vegetable oils, carob bean gum (locust bean gum), glycerol ester of wood rosin, guar gum, gum acacia, gum tragacanth, hydroxylated lecithin, lecithin, methyl-cellulose, mono- and diglycerides of fat-forming fatty acids, pectin, polyglycerol esters of fatty acids, propylene glycol alginate, sodium carboxymethyl cellulose, sodium metaphosphate (sodium hexametaphosphate);

(2) when one or more of the optional ingredients in subitem (1) are used, dioctyl sodium sulfosuccinate complying with the requirements of Code of Federal

Regulations, title 21, section 172.810 (Federal Food and Drug Administration Regulations) may be used in a quantity not in excess of 0.5 percent by weight of such ingredients;

G. one or more of the foaming agents ammoniated glycyrrhizin, gum ghatti, licorice, or glycyrrhiza, yucca (Joshua-tree), yucca (Mohave);

H. caffeine, in an amount not to exceed 0.02 percent by weight of the finished beverage;

I. quinine, as provided in Code of Federal Regulations, title 21, section 172.575, in an amount not to exceed 83 parts per million by weight of the finished beverage;

J. one or more of the chemical preservatives ascorbic acid, benzoic acid, BHA, BHT, calcium disodium EDTA, erythorbic acid, glucose-oxidase/catalase enzyme, methyl or propyl paraben, mordihydroguaiaretic acid, propyl gallate, potassium or sodium benzoate, potassium or sodium bisulfite, potassium or sodium metabisulfite, potassium or sodium sorbate, sorbic acid, sulfur dioxide, or tocopherols; stannous chloride in a quantity not to exceed 11 parts per million calculated as tin (Sn), and in the case of canned soda water, with or without one or more of the other chemical preservatives listed in this item;

K. the defoaming agent dimethylpolysiloxane in an amount not to exceed ten parts per million.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.4140 NAMES OF BEVERAGES.

Subpart 1. **Beverage neither flavored nor sweetened.** The name of the beverage for which a definition and standard of identity is established by parts 1555.4120 to 1555.4160, which is neither flavored nor sweetened, is soda water, club soda, or plain soda.

Subp. 2. **Beverage containing flavoring and sweetening.** The name of each beverage containing flavoring and sweetening ingredients as provided for in part 1555.4130 is “\_\_\_\_\_ soda” or “\_\_\_\_\_ soda water” or “\_\_\_\_\_ carbonated beverage,” the blank being filled in with the word or words that designate the characterizing flavor of the soda water; for example, “grape soda.”

Subp. 3. **Soda water designated by common name.** If the soda water is one generally designated by a particular common name; for example, ginger ale, root beer, or sparkling water, that name may be used in lieu of the name prescribed in subparts 1 and 2. For the purposes of parts 1555.4120 to 1555.4160, a proprietary name that is commonly used by the public as the designation of a particular kind of soda water may likewise be used in lieu of the name prescribed in subparts 1 and 2.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.4150 OPTIONAL INGREDIENTS LABELING.

Soda water that contains the optional ingredient caffeine as provided for in part 1555.4130, item H, artificial flavoring, artificial coloring, or any combination of these shall be labeled to show that fact by the label statement “with \_\_\_\_\_” or “\_\_\_\_\_ added,” the blank being filled in with the word or words, “caffeine,” “artificial flavoring,” “artificial coloring,” or a combination of these words, as appropriate. If the soda water contains one or more of the optional ingredients set forth in part 1555.4130, item J, which has or is intended to have a preservative effect in the finished beverage, it shall be labeled to show that fact by one of the following statements: “\_\_\_\_\_ added as a preservative” or “preserved with \_\_\_\_\_” the blank being filled in with the common name of the preservative ingredient. If soda water contains quinine salts, the label shall bear a prominent declaration either by use of the word “quinine” in the name of the article or by separate declaration.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4160 PLACEMENT OF LABEL STATEMENTS.**

The label statements prescribed in part 1555.4150 for declaring the optional ingredients present shall appear on a labeling surface of the beverage in such a manner as to render the statement likely to be read by the ordinary individual under customary conditions of purchase or use of such beverage. These statements shall immediately and conspicuously precede or follow the name of the beverage, wherever such name is prominently displayed, without intervening, written, printed, or graphic matter; provided, that where such name is part of a trademark or brand, then other written, printed, or graphic matter that is also a part of such trademark or brand may intervene if the label statement required by parts 1555.4140 and 1555.4150 is so placed as to be conspicuously related to the name of the beverage.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4170 BACTERIAL, YEAST, AND MOLD STANDARDS FOR NONALCOHOLIC BEVERAGES.**

No canned or bottled carbonated or still beverages, carbonated, plain, or otherwise, manufactured, mixed, or compounded, shall be sold, offered, or exposed for sale or held in possession for sale in this state, the bacterial count of which at any time after manufacturing, mixing, or compounding exceeds 100 bacteria per milliliter, 20 molds per milliliter, or a mixture of yeasts and molds which exceeds 20 per milliliter collectively, standard plate count, as determined by the arithmetical averages of four consecutive tests of beverage samples taken on separate days.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4180 PURIFIED WATER.**

“Purified water” is a water produced by distillation, deionization, or by reverse osmosis and shall not contain more than ten parts per million of total dissolved solids and otherwise conforms to the sanitary standards for water. Purified water shall be designated by the name “purified water” and the statement “produced by \_\_\_\_\_,” the blank being filled in with the appropriate descriptive words describing the water treatment process; for example, “purified water produced by distillation.” These label statements shall appear on the labeling surface of the container in such a manner as to render the statement likely to be read by the ordinary individual under customary conditions of purchase or use. For the purposes of this part the use of the names “distilled water,” “deionized water,” or “reverse osmosis water” may be used in lieu of the labeling prescribed herein when it properly describes the character and process of the water so designated.

**Statutory Authority:** *MS s 31.10; 31.101*

**OTHER BEVERAGES****1555.4190 PHOSPHATE BEVERAGE.**

A product labeled or sold as a phosphate beverage must contain an appreciable amount of phosphoric acid or acid phosphate, with or without other acid material commonly used in the preparation of beverages, provided that none of the acid ingredients are of such a nature as to render the product injurious to health.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4200 INFORMATION ON BOTTLES.**

The information required to be given on the bottles containing a beverage may appear on a label pasted on the side of the bottle, on the crown or cap, or may be blown in the glass on the side of the bottle, or appear in applied color label on the side of the bottle. All information required by law or rulings must be plainly and conspicuously set forth, in proximity to the name of the article, through any one of the above named methods of labeling.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4210 MISBRANDING.**

The information placed on the bottle by the manufacturer or bottler, whether in the form of a printed label or by means of lettering blown in the glass, must in each case be truly descriptive of the product contained in the bottle. The interchanging of labels, whether printed on paper or on the crown cap or blown in the glass of the bottle, whereby the matter contained in the label is not truly descriptive of the product or its origin, constitutes a misbranding.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4220 CERTAIN NONALCOHOLIC BEVERAGES.**

Beverages which conform to cordials, wines, creme de menthe, etc. in all respects except as to alcoholic content, may be labeled as "nonalcoholic cordials," "nonalcoholic creme de menthe," "nonalcoholic wine," etc. as the case may be.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4230 MODIFIED FRUIT JUICE.**

Such terms as "apple juice," "grape juice," "loganberry juice," "cherry juice," etc. are applicable only to the pure juice of the fruit specified. A fruit juice which has been modified in any way or to which sugar, dextrose, corn syrup, or corn syrup solids have been added shall be plainly labeled so as to indicate such modification or addition, as for example, grape juice with added sugar.

**Statutory Authority:** *MS s 31.10; 31.101*

**CANNED FRUITS****1555.4240 CANNED PEACHES.**

"Canned peaches" is the food prepared from one of the optional peach ingredients specified in part 1555.4250 and one of the optional packing media specified in part 1555.4260. Such food may be seasoned with one or more of the following optional ingredients:

- A. spice;
- B. flavoring, other than artificial flavoring;
- C. a vinegar;

D. peach pits; except in the cases of peeled whole peaches and unpeeled whole peaches, in a quantity not more than one peach pit to each eight ounces of finished canned peaches; and

E. peach kernels, except in the cases of peeled whole peaches and unpeeled whole peaches, and except when the optional ingredient in item D is used. Such food is sealed in a container and is so processed by heat as to prevent spoilage.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4250 OPTIONAL PEACH INGREDIENTS.**

The optional peach ingredients referred to in part 1555.4240 are prepared from mature peaches of the yellow freestone, white clingstone, or white freestone varietal group and are in the following forms of units; peeled whole, unpeeled whole, peeled halves, unpeeled halves, peeled quarters, peeled slices, peeled dice, peeled mixed pieces of irregular sizes and shapes. Each such form of units prepared from each such varietal group is an optional peach ingredient. Each such ingredient, except in the case of peeled whole peaches and unpeeled whole peaches, is pitted. For the purpose of part 1555.4310, the names of such optional peach ingredients are the words "yellow cling" or "yellow clingstone," "white cling" or "white clingstone," "yellow free" or "yellow freestone" or "white free" or "white freestone," as the case may be, preceded or followed by the word or words "whole," "unpeeled whole," "halves" or "halved," "unpeeled halves," or "unpeeled halved," "quarters" or "quartered," "slices" or

“sliced,” “dice” or “diced,” or “mixed pieces of irregular sizes and shapes,” as the case may be.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4260 OPTIONAL PACKING MEDIA.**

The optional packing media referred to in part 1555.4240 are: water; peach juice; slightly sweetened water; light syrup; heavy syrup; extra heavy syrup; slightly sweetened peach juice; light peach juice syrup; heavy peach juice syrup; extra heavy peach juice syrup.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4270 WATER AND PEACH JUICE.**

As used in part 1555.4260 and this part the term “water” means, in addition to water, any mixture of water and peach juice; and the term “peach juice” means the fresh or canned expressed juice of mature peaches of any varietal group specified in part 1555.4250, to which no water is added, directly or indirectly.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4280 LIQUID INGREDIENT AND SACCHARINE INGREDIENT.**

Each of the packing media in part 1555.4260, except water and peach juices, is prepared with a liquid ingredient and a saccharine ingredient. Water is the liquid ingredient from which slightly sweetened water, light syrup, heavy syrup, and extra heavy syrup are prepared and peach juice is the liquid ingredient from which slightly sweetened peach juice, light peach juice syrup, heavy peach juice syrup, and extra heavy peach juice syrup are prepared. The saccharine ingredient from which these packing media are prepared is one of the following: sugar; any combination of sugar and dextrose in which the weight of the solids of the dextrose used is not more than one-half of the weight of the solids of the sugar used; any combination of sugar and corn syrup or glucose syrup in which the weight of the solids of the corn syrup or glucose syrup used is not more than one-third the weight of the solids of the sugar used; or any combination of sugar, dextrose, and corn syrup or glucose syrup in which twice the weight of the solids of the dextrose used added to three times the weight of the solids of the corn syrup or glucose syrup used is not more than the weight of the solids of the sugar used; except that extra heavy peach juice syrup is not prepared with any invert sugar syrup or with any corn syrup other than dried corn syrup or with any glucose syrup other than dried glucose syrup. A packing medium prepared with peach juice and any invert sugar syrup or corn syrup other than dried corn syrup or glucose syrup other than dried glucose syrup is considered to be prepared with water as the liquid ingredient.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4290 DENSITIES.**

The respective densities of the packing media referred to in part 1555.4260, except water and peach juice, as measured on the Brix hydrometer 15 days or more after the peaches are canned, are within the range prescribed for each in the following list:

Brix measurement

- A. slightly sweetened water and slightly sweetened peach juice, less than 14 degrees;
- B. light syrup and light peach juice syrup, 14 degrees or more but less than 19 degrees;
- C. heavy syrup and heavy peach juice syrup, 19 degrees or more but less than 24 degrees;



D. extra heavy syrup and extra heavy peach juice syrup, 24 degrees or more but not more than 35 degrees.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.4300 DEFINITIONS.**

Subpart 1. **Applicability.** For the purposes of parts 1555.4240 to 1555.4320, the following terms have the meanings given them.

Subp. 2. **Sugar and invert sugar syrup.** The term "sugar" means refined sucrose or invert sugar syrup. The term "invert sugar syrup" means an aqueous solution of inverted or partly inverted, refined or partly refined or partly refined sucrose, the solids of which contain not more than 0.3 percent by weight of ash and which is colorless, odorless, and flavorless except for sweetness.

Subp. 3. **Dextrose.** The term "dextrose" means the hydrated or anhydrous, refined monosaccharide obtained from hydrolyzed starch.

Subp. 4. **Corn syrup.** The term "corn syrup" means an aqueous solution obtained by the incomplete hydrolysis of cornstarch, and includes dried corn syrup. The solids of corn syrup and of dried corn syrup contain not less than 58 percent by weight of reducing sugars.

Subp. 5. **Glucose syrup and dried glucose syrup.** The term "glucose syrup" means a clarified, concentrated, aqueous solution of the products obtained by the incomplete hydrolysis of any edible starch. The solids of glucose syrup contain not less than 40 percent by weight of reducing sugars calculated as anhydrous dextrose. "Dried glucose syrup" means the product obtained by drying "glucose syrup."

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.4310 LABEL STATEMENT OF OPTIONAL INGREDIENTS.**

The label shall bear the name of the optional peach ingredient used, as specified in part 1555.4250 and the name whereby the optional packing medium used is designated in parts 1555.4260 to 1555.4290, preceded by "in" or "packed in." When any of the optional ingredients permitted by part 1555.4240, items A to E is used, the label shall bear the words set forth in the corresponding item of this part:

A. "spiced" or "spice added" or "with spice" or in lieu of the word "spice," the common name of the spice;

B. "flavoring added" or "with added flavoring" or, in lieu of the word "flavoring," the common name of the flavoring;

C. "seasoned with vinegar" or "seasoned with \_\_\_\_\_ vinegar," the blank being filled in with the word showing the kind of vinegar used;

D. "seasoned with peach pits; or

E. "seasoned with peach kernels."

When two or more of the optional ingredients specified in part 1555.4240 are used, such words may be combined, as for example, "seasoned with cider, vinegar, cloves, cinnamon oil, and peach kernels."

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.4320 PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.**

Wherever the name "peaches" appears on the label so conspicuously as to be easily seen under the customary conditions of purchase, the words specified in parts 1555.4240 to this part, showing the optional ingredients used, shall immediately and conspicuously precede or follow such name without intervening written, printed, or graphic matter, except that the specific varietal name of the peaches may so intervene.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.4330 STANDARD OF QUALITY FOR CANNED PEACHES.**

The standard of quality for canned peaches is as follows:

A. All units tested in accordance with the method prescribed in part 1555.4340 are pierced by a weight of not more than 300 grams.

B. In the cases of halves and quarters, the weight of each unit is not less than three-fifths ounce and three-tenths ounce, respectively.

C. In the cases of whole peaches, halves, and quarters, the weight of the largest unit in the container is not more than twice the weight of the smallest unit therein.

D. Except in the case of unpeeled peaches, there is present in the finished canned peaches not more than one square inch of peel per each one pound of net contents.

E. Not more than 20 percent of the units in the container are blemished with scab, hail injury, discoloration, or other abnormalities.

F. In the case of whole peaches, halves, quarters, and slices, all units are untrimmed, or are so trimmed as to preserve normal shape.

G. Except in the case of mixed pieces of irregular sizes and shapes, not more than five percent of the units in a container of 20 or more units and not more than one unit in a container of less than 20 units, is crushed or broken. A unit which has lost its normal shape because of ripeness and which bears no mark of crushing shall not be considered or broken.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.4340 METHOD FOR TESTING.**

Canned peaches shall be tested by the following method to determine whether or not they meet the requirements of part 1555.4330, item A:

So trim a test piece from the unit as to fit, with peel surface up, into a supporting receptacle. If the unit is of different firmness in different parts of its peel surface, trim the piece from the firmest part. If the piece is unpeeled, remove the peel.

The top of the receptacle is circular in shape, of 1-1/8 inches inside diameter, with vertical sides; or rectangular in shape, three-fourths inch by one inch inside measurements, with ends vertical and sides sloping downward and joining at the center at a vertical depth of three-fourths inch. Use the circular receptacle for testing units of such size that a test piece can be trimmed therefrom to fit it. Use the rectangular receptacle for testing other units. Test no unit from which a test piece with rectangular peel surface at least one-half inch by one inch cannot be trimmed.

Test the piece by means of a round metal rod 5/32 inch in diameter. To the upper end of the rod is affixed a device to which weight can be added. The rod is held vertically by a support through which it can freely move upward or downward. The lower end of the rod is a plane surface to which the vertical axis of the rod is perpendicular. Adjust the combined weight of the rod and device to 100 grams. Set the receptacle so that the surface of the test piece is held horizontally. Lower the end of the rod to the approximate center of such surface, and add weight to the device at a uniform continuous rate of 12 grams per second until the rod pierces the test piece. Weigh the rod and weighted device.

Test all units in containers of 50 units or less, except those units too small for testing or too soft for trimming.

Test at least 50 units, taken at random, in containers of more than 50 units; but if less than 50 units are of sufficient size and firmness for testing, test those which are of sufficient size and firmness.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.4345 LABEL STATEMENT OF SUBSTANDARD QUALITY.**

If the quality of canned peaches falls below the standard prescribed in part 1555.4330, the label shall bear the general statement of substandard quality specified in part 1550.0920, in the manner and form therein specified; but in lieu of such general

statement of substandard quality, the label may bear the alternative statement "below standard in quality \_\_\_\_\_" the blank to be filled in with the words specified after the corresponding item of part 1555.4330 which such canned peaches fail to meet, as follows:

- A. "not tender";
- B. "small halves" or "small quarters," as the case may be;
- C. "mixed sizes";
- D. "not well peeled";
- E. "blemished";
- F. "unevenly trimmed"; and
- G. "partly crushed or broken."

Such alternative statement shall immediately and conspicuously precede or follow, without intervening written, printed, or graphic matter, the name "peaches" and any words and statements required or authorized to appear with such name by part 1555.4250.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.4350 STANDARD OF FILL OF CONTAINER FOR CANNED PEACHES.**

The standard of fill of container for canned peaches is the maximum quantity of the optional peach ingredient which can be sealed in the container and processed by heat to prevent spoilage, without crushing or breaking such ingredients.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.4360 LABEL STATEMENT OF SUBSTANDARD FILL.**

If canned peaches fall below the standard of fill of container prescribed in part 1555.4350, the label shall bear the general statement of substandard fill specified in part 1550.0920, in the manner and form therein specified.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.4370 CANNED PEACHES WITH RUM.**

Canned peaches with rum conform to the definitions and standard of identity and are subject to the requirements for label statement of optional ingredients, prescribed for canned peaches by parts 1555.4240 to 1555.4320, except that they contain added rum in such amount that its alcohol content is more than three percent but less than five percent by weight.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.4380 CANNED APRICOTS.**

"Canned apricots" is the food prepared from one of the optional apricot ingredients specified in part 1555.4390 and one of the optional packing media specified in part 1555.4400. Such food may be seasoned with one or more of the following optional ingredients:

- A. spice;
- B. flavoring, other than artificial flavoring;
- C. a vinegar;
- D. apricot pits, except in the cases of unpeeled whole apricots and peeled whole apricots, in a quantity not more than one apricot pit to each eight ounces of unfinished canned apricots; and
- E. apricot kernels, except in the cases of unpeeled whole apricots and peeled whole apricots and except when the optional ingredient in item D is used. Such food is sealed in a container and so processed by heat as to prevent spoilage.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4390 OPTIONAL APRICOT INGREDIENTS.**

The optional apricot ingredients referred to in part 1555.4380 are prepared from mature apricots and are in the following forms of units: unpeeled whole, peeled whole, unpeeled halves, peeled halves, unpeeled quarters, peeled quarters, unpeeled slices, peeled slices, unpeeled mixed pieces of irregular sizes and shapes, peeled mixed pieces of irregular sizes and shapes. Each such form of units is an optional apricot ingredient. Each such ingredient, except in the cases of unpeeled whole apricots and peeled whole apricots, is pitted. For the purposes of part 1555.4460, the names of such optional apricot ingredients are "whole," "halves" or "halved," "quarters" or "quartered," "slices" or "sliced," "mixed pieces of irregular sizes and shapes," as the case may be, preceded or followed by "unpeeled" or "peeled," as the case may be.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4400 OPTIONAL PACKING MEDIA.**

The optional packing media referred to in part 1555.4380 are: water; apricot juice; slightly sweetened water; light syrup; heavy syrup; extra heavy syrup; slightly sweetened apricot juice; light apricot juice syrup; heavy apricot juice syrup; and extra heavy apricot juice syrup.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4410 WATER AND APRICOT JUICE.**

As used in part 1555.4400 and this part the term "water" means, in addition to water, any mixture of water and apricot juice; and the term "apricot juice" means the fresh or canned expressed juice of mature apricots to which no water is added, directly or indirectly.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4420 LIQUID INGREDIENT AND SACCHARINE INGREDIENT.**

Each of the packing media in part 1555.4440, except water and apricot juice, is prepared with a liquid ingredient and a saccharine ingredient. Water is the liquid ingredient from which slightly sweetened water, light syrup, heavy syrup, and extra heavy syrup are prepared, and apricot juice is the liquid ingredient from which slightly sweetened apricot juice, light apricot juice syrup, heavy apricot juice syrup, and extra heavy apricot juice syrup are prepared. The saccharine ingredient from which all the packing media except water and apricot juice are prepared is one of the following: sugar; any combination of sugar and dextrose in which the weight of the solids of the dextrose used is not more than one-half the weight of the solids of the sugar used; any combination of sugar and corn syrup or glucose syrup in which the weight of the solids of the corn syrup or glucose syrup used is not more than one-third the weight of the solids of the sugar used; or any combination of sugar, dextrose, and corn syrup or glucose syrup in which twice the weight of the solids of the dextrose used added to three times the weight of the solids of the corn syrup or glucose syrup used is not more than the weight of the solids of the sugar used; except that slightly sweetened apricot juice, light apricot juice syrup, heavy apricot juice syrup, and extra heavy apricot juice syrup are not prepared with any invert sugar syrup or with any corn syrup other than dried corn syrup or with any glucose syrup other than dried glucose syrup. A packing medium prepared with apricot juice and any invert sugar syrup or corn syrup other than dried corn syrup or glucose syrup other than dried glucose syrup is considered to be prepared with water as the liquid ingredient.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4440 DENSITIES.**

The respective densities of the packing media described in part 1555.4400, as measured on the Brix hydrometer 15 days or more after the apricots are canned, are within the range prescribed for each in the following list:

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### Brix measurement

A. slightly sweetened water and slightly sweetened apricot juice, less than 16 degrees;

B. light syrup and light apricot juice syrup, 16 degrees or more but less than 21 degrees;

C. heavy syrup and heavy apricot juice syrup, 21 degrees or more but less than 25 degrees; and

D. extra heavy syrup and extra heavy apricot juice syrup, 25 degrees or more but not more than 40 degrees.

**Statutory Authority:** *MS s 31.10; 31.101*

### 1555.4450 DEFINITIONS.

Subpart 1. **Applicability.** For the purposes of parts 1555.4380 to 1555.4470:

Subp. 2. **Sugar and invert sugar syrup.** The term "sugar" means refined sucrose or invert sugar syrup. The term "invert sugar syrup" means an aqueous solution of inverted or partly inverted refined or partly refined sucrose, the solids of which contain not more than 0.3 percent by weight of ash, and which is colorless, odorless, and flavorless except for sweetness.

Subp. 3. **Dextrose.** The term "dextrose" means the hydrated or anhydrous, refined monosaccharide obtained from hydrolyzed starch.

Subp. 4. **Corn syrup.** The term "corn syrup" means an aqueous solution obtained by the incomplete hydrolysis of cornstarch and includes dried corn syrup; the solids of corn syrup and of dried corn syrup contain not less than 58 percent by weight of reducing sugars.

Subp. 5. **Glucose syrup and dried glucose syrup.** The term "glucose syrup" means a clarified, concentrated, aqueous solution of the products obtained by the incomplete hydrolysis of any edible starch. The solids of glucose syrup contain not less than 40 percent by weight of reducing sugars calculated as anhydrous dextrose. "Dried glucose syrup" means the product obtained by drying "glucose syrup."

**Statutory Authority:** *MS s 31.10; 31.101*

### 1555.4460 LABEL STATEMENT OF OPTIONAL INGREDIENTS.

The label shall bear the name of the optional apricot ingredient used, as specified in part 1555.4390 and the same whereby the optional packing medium used is designated in parts 1555.4400 to 1555.4440, preceded by "in" or "packed in." When any optional ingredient permitted by part 1555.4380 is used, the labels shall bear the words set forth in the corresponding item of this part:

A. "spiced" or "spice added" or "with added spice" or, in lieu of the word "spice," the common name of the spice;

B. "flavoring added" or "with added flavoring" or, in lieu of the word "flavoring," the common name of the flavoring;

C. "seasoned with vinegar" or "seasoned with \_\_\_\_\_ vinegar," the blank being filled in with the word showing the kind of vinegar used;

D. "seasoned with apricot pits";

E. "seasoned with apricot kernels."

When two or more of the optional ingredients specified in part 1555.4380 are used, such words may be combined as for example, "seasoned with cider vinegar, cloves, cinnamon oil, and apricot kernels."

**Statutory Authority:** *MS s 31.10; 31.101*

### 1555.4470 PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.

Wherever the name "apricots" appears on the label so conspicuously as to be easily seen under the customary conditions of purchase, the words specified in parts

1555.4380 to this part, showing the optional ingredients used, shall immediately and conspicuously precede or follow such name without intervening written, printed or graphic matter, except that the specific varietal name of the apricots may so intervene.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.4480 STANDARD OF QUALITY FOR CANNED APRICOTS.**

The standard of quality for canned apricots is as follows:

A. All units tested in accordance with the method prescribed in part 1555.4490 are pierced by a weight of not more than 300 grams;

B. In the cases of halves and quarters, the weight of each unit is not less than two-fifths ounce and one-fifth ounce, respectively;

C. In the cases of whole apricots, halves and quarters, the weight of the largest unit in the container is not more than twice the weight of the smallest unit therein;

D. Not more than 20 percent of the units in the container are blemished with scab, hail injury, discoloration, or other abnormalities;

E. In the cases of whole apricots, halves and quarters, all units are untrimmed or are so trimmed as to preserve normal shape; and

F. Except in the case of mixed pieces of irregular sizes and shapes, not more than five percent of the units in a container of 20 or more units and not more than one unit in a container of less than 20 units, is crushed or broken. A unit which has lost its normal shape because of ripeness and which bears no mark of crushing shall not be considered to be crushed or broken.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.4490 METHOD FOR TESTING.**

Canned apricots shall be tested by the following method to determine whether or not they meet the requirements of part 1555.4480, item A.

So trim a test piece from the unit as to fit, with peel surface up, into a supporting receptacle. If the unit is of different firmness in different parts of its peel surface, trim the piece from the firmest part. If the piece is unpeeled, remove the peel.

The top of the receptacle is circular in shape, of 1-1/8 inches inside diameter, with vertical sides; or rectangular in shape, three-fourths inch by one inch inside measurements, with ends vertical and sides sloping downward and joining at the center at a vertical depth of three-fourths inch. Use the circular receptacle for testing units of such size that a test piece can be trimmed therefrom to fit it. Use the rectangular receptacle for testing other units. Test no unit from which a test piece with rectangular peel surface at least one-half inch by one inch cannot be trimmed.

Test the piece by means of a round metal rod 3/16 inch in diameter. To the upper end of the rod is affixed a device to which weight can be added. The rod is held vertically by a support through which it can freely move upward or downward. The lower end of the rod is a plane surface to which the vertical axis of the rod is perpendicular. Adjust the combined weight of the rod and device to 100 grams. Set the receptacle so that the surface of the test piece is held horizontally. Lower the end of the rod to the approximate center of such surface and add weight to the device at a uniform, continuous rate of 12 grams per second until the rod pierces the test piece. Weigh the rod and weighted device.

Test all units in containers of 50 units or less, except those units too small for testing or too soft for trimming.

Test at least 50 units, taken at random, in containers of more than 50 units; but if less than 50 units are of sufficient size and firmness for testing, test those which are of sufficient size and firmness.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4500 LABEL STATEMENT OF SUBSTANDARD QUALITY.**

If the quality of canned apricots falls below the standard prescribed in part 1555.4480, the label shall bear the general statement of substandard quality specified in part 1550.0920, in the manner and form therein specified; but in lieu of such general statement of substandard quality, the label may bear the alternative statement "below standard in quality \_\_\_\_\_," the blank to be filled in with the words specified after the corresponding item of part 1555.4480 which such canned apricots fail to meet, as follows:

- A. "not tender";
- B. "small halves" or "small quarters," as the case may be;
- C. "mixed sizes";
- D. "blemished";
- E. "unevenly trimmed"; and
- F. "partly crushed or broken."

Such alternative statement shall immediately and conspicuously precede or follow, without intervening written, printed, or graphic matter, the name "apricots" and any words and statements required or authorized to appear with such name by part 1555.4390.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4510 STANDARD FILL OF CONTAINER FOR CANNED APRICOTS.**

The standard fill of container for canned apricots is the maximum quantity of the optional apricot ingredient which can be sealed in the container and processed by heat to prevent spoilage, without crushing or breaking such ingredient.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4520 LABEL STATEMENT OF SUBSTANDARD FILL.**

If canned apricots fall below the standard of fill of container prescribed in part 1555.4510, the label shall bear the general statement of substandard fill specified in part 1550.0920 in the manner and form therein specified.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4530 CANNED APRICOTS WITH RUM.**

Canned apricots with rum conform to the definition and standard of identity and are subject to the requirements for label statement of optional ingredients prescribed for canned apricots by parts 1555.4380 to 1555.4470, except that they contain added rum in an amount that alcohol content is more than three percent but less than five percent by weight.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4540 CANNED PEARS.**

"Canned pears" is the food prepared from one of the optional pear ingredients specified in part 1555.4550 and one of the optional packing media specified in part 1555.4560. Such food may be seasoned with one or more of the following optional ingredients: spice; flavoring, other than artificial flavoring; and vinegar. Such food is sealed in a container and so processed by heat as to prevent spoilage.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4550 OPTIONAL PEAR INGREDIENTS.**

The optional pear ingredients referred to in part 1555.4540 are prepared from mature pears and are in the following forms of units: peeled whole, unpeeled whole, peeled halves, unpeeled halves, peeled quarters, peeled slices, peeled dice, peeled mixed pieces of irregular sizes and shapes. Each such form of units is an optional pear ingredient. Each such ingredient, except in the cases of peeled whole pears and

unpeeled whole pears, is cored. For the purposes of part 1555.4610, the respective names of such optional pear ingredients are "whole," "halved" or "halves," "quarters" or "quartered," "slices" or "sliced," "dice" or "diced," "mixed pieces of irregular sizes and shapes," preceded or followed in case the units are whole or halves and are unpeeled, by the word "unpeeled."

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4560 OPTIONAL PACKING MEDIA.**

The optional packing media referred to in part 1555.4540 are: water; pear juice; slightly sweetened water; light syrup; heavy syrup; extra heavy syrup; slightly sweetened pear juice; light pear juice syrup; heavy pear juice syrup; extra heavy pear juice syrup.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4570 WATER AND PEAR JUICE.**

As used in part 1555.4560 and this part the term "water" means, in addition to water, any mixture of water and pear juice; and the term "pear juice" means the fresh or canned expressed juice of mature pears to which no water is added, directly or indirectly.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4580 LIQUID INGREDIENT AND SACCHARINE INGREDIENT.**

Each of the packing media in part 1555.4560 except water and pear juice is prepared with a liquid ingredient and a saccharine ingredient. Water is the liquid ingredient from which slightly sweetened water, light syrup, heavy syrup, and extra heavy syrup are prepared, and pear juice is the liquid ingredient from which slightly sweetened pear juice, light pear juice syrup, heavy pear juice syrup, and extra heavy pear juice syrup are prepared. The saccharine ingredient from which all the packing media except water and pear juice are prepared is one of the following: sugar; any combination of sugar and dextrose in which the weight of the solids of the dextrose used is not more than one-half the weight of the solids of the sugar used; any combination of sugar and corn syrup or glucose syrup in which the weight of the solids of the corn syrup or glucose syrup used is not more than one-third the weight of the solids of the sugar used; or any combination of sugar, dextrose, and corn syrup or glucose syrup in which twice the weight of the solids of the dextrose used added to three times the weight of the solids of the corn syrup or glucose syrup used is not more than the weight of the solids of the sugar used; except that slightly sweetened pear juice, light pear juice syrup, heavy pear juice syrup, and extra heavy pear juice syrup are not prepared with any invert sugar syrup or with any corn syrup other than dried corn syrup or with any glucose syrup other than dried glucose syrup. A packing medium prepared with pear juice and any invert sugar syrup or corn syrup other than dried corn syrup or glucose syrup other than dried glucose syrup is considered to be prepared with water as the liquid ingredient.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4590 DENSITIES.**

The respective densities of all packing media referred to in part 1555.4560, except water and pear juice, as measured on the Brix hydrometer 15 days or more after the pears are canned, are within the range prescribed for each in the following list:

**Brix measurement**

- A. slightly sweetened water and slightly sweetened pear juice, less than 14 degrees;
- B. light syrup and light pear juice syrup, 14 degrees or more but less than 18 degrees;



C. heavy syrup and heavy pear juice syrup, 18 degrees or more but less than 22 degrees;

D. extra heavy syrup and extra heavy pear juice syrup, 22 degrees or more but not more than 35 degrees.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.4600 DEFINITIONS.

Subpart 1. **Applicability.** For the purposes of parts 1555.4540 to 1555.4620:

Subp. 2. **Sugar and invert sugar syrup.** The term "sugar" means refined sucrose or invert sugar syrup. The term "invert sugar syrup" means an aqueous solution of inverted or partly inverted, refined or partly refined sucrose the solids of which contain not more than 0.3 percent by weight of ash and which is colorless, odorless, and flavorless except for sweetness.

Subp. 3. **Dextrose.** The term "dextrose" means the hydrated or anhydrous refined monosaccharide obtained from hydrolyzed starch.

Subp. 4. **Corn syrup.** The term "corn syrup" means an aqueous solution obtained by the incomplete hydrolysis of cornstarch and includes dried corn syrup; the solids of corn syrup and of dried corn syrup contain not less than 58 percent by weight of reducing sugars.

Subp. 5. **Glucose syrup and dried glucose syrup.** The term "glucose syrup" means a clarified, concentrated, aqueous solution of the products obtained by the incomplete hydrolysis of any edible starch. The solids of glucose syrup contain not less than 40 percent by weight of reducing sugars calculated as anhydrous dextrose. "Dried glucose syrup" means the product obtained by drying "glucose syrup."

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.4610 LABEL STATEMENT OF OPTIONAL INGREDIENTS.

The label shall bear the name of the optional pear ingredient used, as specified in part 1555.4550 and the name whereby the optional packing medium used is designated in parts 1555.4560 to 1555.4590, preceded by "in" or "packed in." When any optional ingredient permitted by part 1555.4540 is used, the label shall bear the words set forth in the corresponding item of this part:

A. "spiced" or "spice added" or "with added spice" or, in lieu of the word "spice," the common name of the spice;

B. "flavoring added" or "with added flavoring" or, in lieu of the word "flavoring," the common name of the flavoring;

C. "seasoned with vinegar" or "seasoned with \_\_\_\_\_ vinegar," the blank being filled in with the word showing the kind of vinegar used. When two or all of the optional ingredients specified in part 1555.4540 are used, such words may be combined, as for example, "seasoned with cider vinegar, cloves, and cinnamon oil."

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.4620 PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.

Wherever the name "pears" appears on the label so conspicuously as to be easily seen under the customary conditions of purchase, the words specified in parts 1555.4540 to 1555.4620, showing the optional ingredients used, shall immediately and conspicuously precede or follow such name without intervening written, printed, or graphic matter, except that the specific varietal name of the pears may so intervene.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.4630 STANDARD OF QUALITY FOR CANNED PEARS.

The standard of quality for canned pears is as follows:

A. all units tested in accordance with the method prescribed in part 1555.4640 are pierced by a weight of not more than 300 grams;

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B. in the cases of halves and quarters, the weight of each unit is not less than three-fifths ounce and three-tenths ounces, respectively;

C. in the cases of whole pears, halves and quarters, the weight of the largest unit in the container is not more than twice the weight of the smallest unit therein;

D. except in the case of unpeeled pears, there is present in the finished canned pears not more than one square inch of peel per each one pound of net contents;

E. not more than 20 percent of the units in the container are blemished with scab, hail injury, discoloration, or other abnormalities;

F. in the cases of whole pears, halves and quarters, all units are untrimmed or are so trimmed as to preserve normal shape; and

G. except in the case of mixed pieces of irregular sizes and shapes, not more than ten percent of the units in a container of ten or more units and not more than one unit in a container of less than ten units, is crushed or broken.

A unit which has lost its normal shape because of ripeness and which bears no mark of crushing shall not be considered to be crushed or broken.

**Statutory Authority:** *MS s 31.10; 31.101*

## 1555.4640 METHOD FOR TESTING.

Canned pears shall be tested by the following method to determine whether or not they meet the requirements of part 1555.4630, item A.

So trim a test piece from the unit as to fit, with peel surface up, into a supporting receptacle. If the unit is of different firmness in different parts of its peel surface, trim the piece from the firmest part. If the piece is unpeeled remove the peel.

The top of the receptacle is circular in shape of 1-1/8 inches inside diameter, with vertical sides; or rectangular in shape, three-fourths inch by one inch inside measurements, with ends vertical and sides sloping downward and joining at the center at a vertical depth of three-fourths inch. Use the circular receptacle for testing units of such size that a test piece can be trimmed therefrom to fit it. Use the rectangular receptacle for testing other units. Test no unit from which a test piece with rectangular peel surface at least one-half inch by one inch cannot be trimmed.

Test the piece by means of a round metal rod 5/32 inch in diameter. To the upper end of the rod is affixed a device to which weight can be added. The rod is held vertically by a support through which it can freely move upward or downward. The lower end of the rod is a plane surface to which the vertical axis of the rod is perpendicular. Adjust the combined weight of the rod and device to 100 grams. Set the receptacle so that the surface of the test piece is held horizontally. Lower the end of the rod to the approximate center of such surface and add weight to the device at a uniform, continuous rate of 12 grams per second until the rod pierces the test piece. Weigh the rod and weighted device.

Test all units in containers of 50 units or less, except those units too small for testing or too soft for trimming.

Test at least 50 units, taken at random, in containers of more than 50 units; but if less than 50 units are of sufficient size and firmness for testing, test those which are of sufficient size and firmness.

**Statutory Authority:** *MS s 31.10; 31.101*

## 1555.4650 LABEL STATEMENT OF SUBSTANDARD QUALITY.

If the quality of canned pears falls below the standard prescribed in part 1555.4630, the label shall bear the general statement of substandard quality specified in part 1550.0920, in the manner and form therein specified, but in lieu of such general statement of substandard quality, the label may bear the alternative statement "below standard in quality \_\_\_\_\_," the blank to be filled in with the words specified

in the item of this part corresponding to the item of part 1555.4630 which such canned pears fail to meet, as follows:

- A. "not tender;"
- B. "small halves" or "small quarters," as the case may be;
- C. "mixed sizes";
- D. "not well peeled";
- E. "blemished";
- F. "unevenly trimmed"; and
- G. "partly crushed or broken."

Such alternative statement shall immediately and conspicuously precede or follow, without intervening written, printed, or graphic matter, the name "pears" and any words and statements required or authorized to appear with such names by parts 1555.4540 to 1555.4620.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.4660 STANDARD FILL OF CONTAINER FOR CANNED PEARS.**

The standard of fill of container for canned pears is the maximum quantity of the optional pear ingredient which can be sealed in the container and processed by heat to prevent spoilage, without crushing or breaking such ingredient.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.4670 LABEL STATEMENT OF SUBSTANDARD FILL.**

If canned pears fall below the standard of fill of container prescribed in part 1555.4660, the label shall bear the general statement of substandard fill specified in part 1550.0920, in the manner and form therein specified.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.4680 CANNED PEARS WITH RUM.**

Canned pears with rum conform to the definition and standard of identity and are subject to the requirements for label statement of optional ingredients prescribed for canned pears by parts 1555.4540 to 1555.4620, except that they contain added rum in such amount that its alcohol content is more than three percent but less than five percent by weight.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.4690 CANNED CHERRIES.**

"Canned cherries" is the food prepared from one of the optional cherry ingredients specified in part 1555.4700 and one of the optional packing media specified in parts 1555.4710 to 1555.4740. Such food may be seasoned with one or more of the following optional ingredients:

- A. spice;
- B. flavoring, other than artificial flavoring; and
- C. vinegar.

Such food is sealed in a container and so processed by heat as to prevent spoilage.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.4700 OPTIONAL CHERRY INGREDIENTS.**

The optional cherry ingredients referred to in part 1555.4690 are prepared from mature cherries of the red sour, light sweet, or dark sweet varietal group. Pitted cherries of each such group and unpitted cherries of each such group are an optional cherry ingredient. For the purposes of part 1555.4760, the names of such optional cherry ingredients are the words "red sour" or "red tart," "light sweet" or "dark

sweet," as the case may be, preceded or followed by the word "pitted" in case such ingredients are pitted.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.4710 OPTIONAL PACKING MEDIA.

The optional packing media referred to in part 1555.4690 are:

- A. water;
- B. cherry juice;
- C. slightly sweetened water;
- D. light syrup;
- E. heavy syrup;
- F. extra heavy syrup;
- G. slightly sweetened cherry juice;
- H. light cherry juice syrup;
- I. heavy cherry juice syrup; and
- J. extra heavy cherry juice syrup.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.4720 WATER AND CHERRY JUICE.

As used in part 1555.4710 and this part the term "water" means, in addition to water, any mixture of water and cherry juice; and the term "cherry juice" means the fresh or canned expressed juice of mature cherries, of any varietal group specified in part 1555.4700, to which no water is added directly or indirectly.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.4730 LIQUID INGREDIENT AND SACCHARINE INGREDIENT.

Each of the packing media in part 1555.4710, items C to J is prepared with a liquid ingredient and a saccharine ingredient. Water is the liquid ingredient from which slightly sweetened water, light syrup, heavy syrup, and extra heavy syrup are prepared and cherry juice is the liquid ingredient from which slightly sweetened cherry juice, light cherry juice syrup, heavy cherry juice syrup, and extra heavy cherry juice syrup are prepared. The saccharine ingredient from which all the packing media except water and cherry juice are prepared is one of the following: sugar; any combination of sugar and dextrose in which the weight of the solids of the dextrose used is not more than one-half the weight of the solids of the sugar used; any combination of sugar and corn syrup or glucose syrup in which the weight of the solids of the corn syrup or glucose syrup used is not more than one-third the weight of the solids of the sugar used; or any combination of sugar, dextrose, and corn syrup or glucose syrup in which twice the weight of the solids of the dextrose used added to three times the weight of the solids of the corn syrup or glucose syrup used is not more than the weight of the solids of the sugar used; except that slightly sweetened cherry juice, light cherry juice syrup, heavy cherry juice syrup, and extra heavy cherry juice syrup are not prepared with any invert sugar syrup or with any corn syrup other than dried corn syrup or with any glucose syrup other than dried glucose syrup. A packing medium prepared with cherry juice and any invert sugar syrup or corn syrup other than dried corn syrup or glucose syrup other than dried glucose syrup is considered to be prepared with water as the liquid ingredient.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.4740 DENSITIES.

Subpart 1. **General.** The respective densities of the packing media referred to in part 1555.4730, except water and cherry juice, as measured on the Brix hydrometer 15 days or more after the cherries are canned, are within the range prescribed for each in subparts 2 and 3.

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Subp. 2. **Sweet cherries.** In case of sweet cherries:

- A. slightly sweetened water and slightly sweetened cherry juice, less than 16 degrees;
- B. light syrup and light cherry juice syrup, 16 degrees or more but less than 20 degrees;
- C. heavy syrup and heavy cherry juice syrup, 20 degrees or more but less than 25 degrees; and
- D. extra heavy syrup and extra heavy cherry juice syrup, 25 degrees or more but not more than 35 degrees.

Subp. 3. **Red sour cherries.** In case of red sour cherries:

- A. slightly sweetened water and slightly sweetened cherry juice, less than 18 degrees;
- B. light syrup and light cherry juice syrup, 18 degrees or more but less than 22 degrees;
- C. heavy syrup and heavy cherry juice syrup, 22 degrees or more but less than 28 degrees; and
- D. extra heavy syrup and extra heavy cherry juice syrup, 28 degrees or more but not more than 45 degrees.

**Statutory Authority:** *MS s 31.10; 31.101*

## 1555.4750 DEFINITIONS.

Subpart 1. **Applicability.** For the purposes of parts 1555.4690 to 1555.4770, the following definitions apply.

Subp. 2. **Sugar and invert sugar syrup.** The term "sugar" means refined sucrose or invert sugar syrup. The term "invert sugar syrup" means an aqueous solution of inverted or partly inverted, refined or partly refined sucrose, the solids of which contain not more than 0.3 percent by weight of ash and which is colorless, odorless, and flavorless except for sweetness.

Subp. 3. **Dextrose.** The term "dextrose" means the hydrated or anhydrous refined monosaccharide obtained from hydrolyzed starch.

Subp. 4. **Corn syrup.** The term "corn syrup" means an aqueous solution obtained by the incomplete hydrolysis of cornstarch and includes dried corn syrup; the solids of corn syrup and of dried corn syrup contain not less than 58 percent by weight of reducing sugars.

Subp. 5. **Glucose syrup and dried glucose syrup.** The term "glucose syrup" means a clarified, concentrated, aqueous solution of the products obtained by the incomplete hydrolysis of any edible starch. The solids of glucose syrup contain not less than 40 percent by weight of reducing sugars calculated as anhydrous dextrose. "Dried glucose syrup" means the product obtained by drying "glucose syrup."

**Statutory Authority:** *MS s 31.10; 31.101*

## 1555.4760 LABEL STATEMENT OF OPTIONAL INGREDIENTS.

The label shall bear the name of the optional cherry ingredient used, as specified in part 1555.4700 and the name whereby the optional packing medium used is designated in parts 1555.4710 to 1555.4740, preceded by "in" or "packed in." When any optional ingredient permitted by part 1555.4690 is used, the label shall bear the words set forth:

- A. "spiced" or "spice added" or "with added spice" or, in lieu of the word "spice," the common name of the spice;
- B. "flavoring added" or "with added flavoring" or, in lieu of the word "flavoring" the common name of the flavoring; and
- C. "seasoned with vinegar" or "seasoned with \_\_\_\_\_ vinegar," the blank being filled in with the word showing the kind of vinegar used. When two or all of the

optional ingredients specified in part 1555.4690 are used, such words may be combined, as for example, "seasoned with cider vinegar, cloves, and cinnamon oil."

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4770 PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.**

Wherever the name "cherries" appears on the label so conspicuously as to be easily seen under the customary conditions of purchase, the words specified in parts 1555.4690 to 1555.4770 showing the optional ingredients used, shall immediately and conspicuously precede or follow such name without intervening written, printed, or graphic matter except that the specific varietal name of the cherries may so intervene.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4780 STANDARD OF QUALITY FOR CANNED CHERRIES.**

The standard of quality for canned cherries is as follows:

A. In the case of pitted cherries, not more than one pit is present in each 20 ounces of canned cherries, as determined by the method prescribed in part 1555.4790.

B. In the case of unpitted cherries, the weight of each cherry in the container is not less than one-tenth ounce.

C. In the case of unpitted cherries, the weight of the largest cherry in the container is not more than twice the weight of the smallest cherry therein.

D. In the case of unpitted cherries, the total weight of pits is not more than 12 percent of the weight of drained cherries, as determined by the method prescribed in part 1555.4800.

E. Not more than 15 percent by count of the cherries in the container are blemished with scab, hail injury, discoloration, scar tissue, or other abnormality. A unit showing skin discoloration having an aggregate area not exceeding that of a circle 3/16 inch in diameter and not extending into the fruit tissue shall not be considered as blemished.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4790 TESTS FOR STANDARDS OF QUALITY FOR PITTED CANNED CHERRIES.**

Pitted canned cherries shall be tested by the following method to determine whether or not they comply with the requirements of part 1555.4780, item A: take at random such number of containers as to have a total quantity of contents of at least 24 pounds. Open the containers and weigh the contents.

Count the pits and pieces of pit shell in such total quantity. Count a piece of pit shell equal to or smaller than one-half pit shell as one-half pit and a piece of pit shell larger than one-half pit shell as one pit; but when two or more pieces of pit shell are within or attached to a single cherry, count such pieces as one-half pit if their combined size is equivalent to that of one-half pit shell or less and as one pit if their combined size is equivalent to that of more than one-half pit shell.

From the total number of pits so counted and the combined weight of the contents of all the containers, calculate the number of pits present in each 20 ounces of canned cherries.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4800 TESTS FOR STANDARDS OF QUALITY FOR UNPITTED CANNED CHERRIES.**

Unpitted canned cherries shall be tested by the following method to determine whether or not they comply with the requirements of part 1555.4780, item D: tilt the opened container so as to distribute the contents over the meshes of a circular sieve which has previously been weighed. The diameter of the sieve is eight inches if the quantity of the contents of the container is less than three pounds or 12 inches if such

quantity is three pounds or more. The bottom of the sieve is No. 8 woven wire cloth which complies with the specification for such cloth set forth on page 3 of "Standard Specifications for Sieves," published October 25, 1938, by United States Department of Commerce, National Bureau of Standards. Without shifting the cherries, so incline the sieve as to facilitate drainage.

Two minutes from the time drainage begins, weigh the sieve and drained cherries. The weight so found, less the weight of the sieve, shall be considered to be the weight of drained cherries.

Pit the cherries and wash the pits free from adhering flesh. Drain and weigh the pits by the method prescribed above. Divide the weight of pits so found by the weight of drained cherries and multiply by 100.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4810 LABEL STATEMENT OF SUBSTANDARD QUALITY.**

If the quality of canned cherries falls below the standard prescribed in part 1555.4780, the label shall bear the general statement of substandard quality specified in part 1550.0920, in the manner and form therein specified; but in lieu of such general statement of substandard quality, the label may bear the alternative statement "below standard in quality \_\_\_\_\_," the blank to be filled in with the words specified in the item of this part corresponding to the item of part 1555.4780 which such canned cherries fail to meet, as follows:

- A. "partially pitted;"
- B. "small;"
- C. "mixed sizes;"
- D. "thin fleshed;" and
- E. "blemished."

Such alternative statement shall immediately and conspicuously precede or follow, without intervening written, printed, or graphic matter, the name "cherries" and any words and statements required or authorized to appear with such name by parts 1555.4690 to 1555.4770.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4820 STANDARD OF FILL OF CONTAINER FOR CANNED CHERRIES.**

The standard of fill of container for canned cherries is the maximum quantity of the optional cherry ingredients which can be sealed in the container and processed by heat to prevent spoilage, without crushing such ingredient.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4830 LABEL STATEMENT OF SUBSTANDARD FILL.**

If canned cherries fall below the standard of fill of container prescribed in part 1555.4820, the label shall bear the general statement of substandard fill specified in part 1550.0920, in the manner and form therein specified.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4840 CANNED CHERRIES WITH RUM.**

Canned cherries with rum conform to the definition and standard of identity and are subject to the requirements for label statement of optional ingredients prescribed for canned cherries by parts 1555.4690 to 1555.4770 of this rule, except that these contain added rum in such amount that their alcohol content is more than three percent but less than five percent by weight.

**Statutory Authority:** *MS s 31.10; 31.101*

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### 1555.4845 CANNED FRUIT COCKTAIL, CANNED COCKTAIL FRUITS, CANNED FRUITS FOR COCKTAIL.

"Canned fruit cocktail," "canned cocktail fruits," "canned fruits for cocktail" is the food prepared from the mixture of fruit ingredients prescribed in part 1555.4850, in the forms and proportions therein prescribed and one of the optional packing media specified in part 1555.4860. It is sealed in a container and is so processed by heat as to prevent spoilage.

**Statutory Authority:** *MS s 31.10; 31.101*

### 1555.4850 FRUIT INGREDIENTS.

The fruit ingredients referred to in part 1555.4845, the forms of each and the percent by weight of each in the mixture of drained fruit from the finished canned fruit cocktail are as follows:

A. peaches of any yellow variety, which are pitted, peeled, and diced, not less than 30 percent and not more than 50 percent;

B. pears of any variety, which are peeled, cored and diced, not less than 25 percent and not more than 45 percent;

C. whole grapes of any seedless variety, not less than six percent and not more than 20 percent;

D. pineapples of any variety, which are peeled, cored, and cut into sectors or into dice, not less than six percent and not more than 16 percent; and

E. one of the following optional cherry ingredients, each of which is stemmed, pitted, and cut into approximate halves, not less than two percent and not more than six percent:

(1) cherries of any light, sweet variety;

(2) cherries artificially colored red; or

(3) cherries artificially colored red and artificially flavored.

Each such fruit ingredient is prepared from mature fruit which is fresh or canned. Notwithstanding the preceding provisions of this paragraph, each 4-1/2 ounces avoirdupois of the finished canned fruit cocktail and each fraction thereof greater than two ounces avoirdupois contain not less than two sectors or three dice of pineapple and not less than one approximate half of the optional cherry ingredient.

**Statutory Authority:** *MS s 31.10; 31.101*

### 1555.4860 OPTIONAL PACKING MEDIA.

The optional packing media referred to in part 1555.4845 are as follows:

A. water;

B. fruit juice;

C. light syrup;

D. heavy syrup;

E. extra heavy syrup;

F. light fruit juice syrup;

G. heavy fruit juice syrup;

H. extra heavy fruit juice syrup.

**Statutory Authority:** *MS s 31.10; 31.101*

### 1555.4870 LIQUID INGREDIENT AND SACCHARINE INGREDIENT.

Light syrup, heavy syrup, and extra heavy syrup are prepared with water as their liquid ingredient, and light fruit juice syrup, heavy fruit juice syrup, and extra heavy fruit juice syrup are prepared with fruit juice as their liquid ingredient. Except as provided in part 1555.4880, subpart 8, each of these packing media except water and fruit juice are prepared with any one of the following saccharine ingredients: sugar; any



combination of sugar and dextrose in which the weight of the solids of the dextrose used is not more than one half the weight of the solids of the sugar used; any combination of sugar and corn syrup or glucose syrup in which the weight of the solids of the corn syrup or glucose syrup used is not more than one-third the weight of the solids of the sugar used; or any combination of sugar, dextrose, and corn syrup or glucose syrup in which the weight of the solids of the dextrose used multiplied by two, added to the weight of the solids of the corn syrup or the glucose syrup used multiplied by three, is not more than the weight of the solids of the sugar used. The respective densities of the packing media except water and fruit juice as measured on the Brix hydrometer 15 days or more after the fruit cocktail is canned are within the range prescribed for each in the following list:

A. light syrup and light fruit juice syrup, 14 degrees or more but less than 18 degrees;

B. heavy syrup and heavy fruit juice syrup, 18 degrees or more but less than 22 degrees; and

C. extra heavy syrup and extra heavy fruit juice syrup, 22 degrees or more but not more than 35 degrees.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.4880 DEFINITIONS.

**Subpart 1. Applicability.** For the purposes of parts 1555.4845 to 1555.4890, the following terms have the meanings given them.

**Subp. 2. Water.** The term "water" means, in addition to water, both the liquid drained from any fruit ingredient previously canned in water as its sole packing medium and any mixture of water and fruit juice, including the liquid drained from any fruit ingredient previously canned in such mixture.

**Subp. 3. Fruit juice.** The term "fruit juice" means the fresh or canned, expressed juice or juices of one or more of the mature fruits named in part 1555.4850 including the liquid drained from any fruit ingredient previously canned in such juice or juices as its sole packing medium, to which no water has been added directly or indirectly. Fruit juice may be strained or filtered.

**Subp. 4. Sugar; invert sugar syrup.** The term "sugar" means refined sucrose or invert sugar syrup. The term "invert sugar syrup" means an aqueous syrup of inverted or partly inverted, refined or partly refined sucrose, the solids of which contain not more than 0.3 percent by weight of ash and which is colorless, odorless, and flavorless except for sweetness.

**Subp. 5. Dextrose.** The term "dextrose" means the hydrated or anhydrous refined monosaccharide obtained from hydrolyzed starch.

**Subp. 6. Corn syrup.** The term "corn syrup" means an aqueous solution obtained by the incomplete hydrolysis of corn starch and includes dried corn syrup; the solids of corn syrup and dried corn syrup contain not less than 58 percent by weight of reducing sugars.

**Subp. 7. Glucose syrup and dried glucose syrup.** The term "glucose syrup" means a clarified, concentrated, aqueous solution of the products obtained by the incomplete hydrolysis of any edible starch. The solids of glucose syrup contain not less than 40 percent by weight of reducing sugars calculated as anhydrous dextrose. "Dried glucose syrup" means the product obtained by drying "glucose syrup."

**Subp. 8. Light syrup, heavy syrup, or extra heavy syrup.** When the optional packing medium is prepared with fruit juice and invert sugar syrup or corn syrup other than dried corn syrup or glucose syrup other than dried glucose syrup, it shall be considered to be light syrup, heavy syrup, or an extra heavy syrup, as the case may be and not a light fruit juice syrup, heavy fruit juice syrup or an extra heavy fruit juice syrup. The term "light syrup," "heavy syrup," or "extra heavy syrup" includes a syrup which conforms in all other respects to the provisions of parts 1555.4845 to 1555.4890, in the preparation of which there is used the liquid drained from any fruit ingredient

previously canned in a packing medium consisting wholly of the liquid and saccharine ingredients of a light syrup, heavy syrup, or extra heavy syrup.

Subp. 9. **Light fruit juice syrup, heavy fruit juice syrup, or extra heavy fruit juice syrup.** Except as provided in subpart 8, the term "light fruit juice syrup," "heavy fruit juice syrup," or "extra heavy fruit juice syrup" includes a syrup which conforms in all other respects to the provisions of parts 1555.4845 to 1555.4890, in the preparation of which there is used the liquid drained from any fruit ingredients previously canned in a packing medium consisting wholly of the liquid and saccharine ingredients of light fruit juice syrup, heavy fruit juice syrup or extra heavy fruit juice syrup.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4890 OPTIONAL INGREDIENTS LABELING.**

The optional ingredients specified in parts 1555.4850, item E, subitems (2) and (3) and 1555.4860, items A to H, inclusive, are hereby designated as optional ingredients which, when used, shall be named on the label by the name whereby each is so specified. Such names shall immediately and conspicuously, without intervening written, printed, or graphic matter, precede or follow the name "fruit cocktail," "cocktail fruits," or "fruits for cocktail" wherever it appears on the label so conspicuously as to be easily seen under customary conditions of purchase.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4900 STANDARD OF QUALITY FOR CANNED FRUIT COCKTAIL.**

The standard of quality for canned fruit cocktail is as follows:

A. Not more than 20 percent by weight of the units in the container of peach or pear or of pineapple if the units thereof are diced, are more than three-fourths inch in greatest edge dimensions or pass through the meshes of a sieve designated as 5/16 inch in Table I of "Standard Specifications for Sieves," published March 1, 1940, in L.C. 584 of the National Bureau of Standards, United States Department of Commerce. If the units of pineapple are in the form of sectors, not more than 20 percent of such sectors in the container fail to conform to the following dimensions: The length of the outside arc is not more than three-fourths inch but is more than three-eighths inch; the thickness is not more than one-half inch but is more than 5/16 inch; the length (measured along the radius from the inside arc to the outside arc) is not more than 1-1/4 inches but is more than three-fourths inch.

B. Not more than ten percent of the grapes in a container containing ten grapes or more and not more than one grape in a container containing less than ten grapes, is cracked to the extent of being severed into two parts or is crushed to the extent that their normal shape is destroyed.

C. Not more than ten percent of the grapes in a container containing ten grapes or more and not more than one grape in a container containing less than ten grapes, has the cap stem attached.

D. There is present in the finished canned fruit cocktail not more than one square inch of pear peel per each one pound of drained weight of units of pear plus the weight of a proportion of the packing medium which is the same proportion as the drained weight of the units of pear, bears to the drained weight of the entire contents of the can. Such drained weights shall be determined by the method prescribed in part 1555.4920.

E. There is present in the finished canned fruit cocktail not more than one square inch of peach peel per each one pound of drained weight of units of peach plus the weight of a proportion of the packing medium which is the same proportion as the drained weight of units of peach, bears to the drained weight of the entire contents of the can. Such drained weights shall be determined by the method prescribed in part 1555.4920.

F. Not more than 15 percent of the units of cherry ingredient and not more than 20 percent of the units of peach, pear, or grape, in the container is blemished with scab, hail injury, scar tissue or other abnormality.

G. If the cherry ingredient is artificially colored, the color of not more than 15 percent of the units thereof in a container containing more than six units and of not more than one unit in a container containing six units or less, is other than evenly distributed in the unit or other than uniform with the color of the other units of the cherry ingredient.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4910 LABEL STATEMENT OF SUBSTANDARD QUALITY.**

If the quality of canned fruit cocktail falls below the standard prescribed in part 1555.4900, the label shall bear the general statement of substandard quality specified in part 1550.0920, in the manner and form therein specified.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4920 STANDARD OF FILL OF CONTAINER FOR CANNED FRUIT COCKTAIL.**

The standard of fill of container for canned fruit cocktail is a fill such that the total weight of drained fruit is not less than 65 percent of the water capacity of the container, as determined by the general method for water capacity of containers prescribed in parts 1550.0900 to 1550.0910. Such total weight of drained fruit is determined by the following method: Tilt the opened container so as to distribute the contents evenly over the meshes of a circular sieve which has been previously weighed. The diameter of the sieve is eight inches if the quantity of contents of the container is less than three pounds and 12 inches if such quantity is three pounds or more. The bottom of the sieve is woven wire cloth which complies with the specifications for such cloth set forth under "2380 Micron (No. 8)" in Table 1 of "Standard Specifications for Sieves," published March 1, 1940, in L.C. 584 of the United States Department of Commerce, National Bureau of Standards. Without shifting the material on the sieve, so incline the sieve as to facilitate drainage. Two minutes from the time drainage begins, weigh the sieve and drained fruit. The weight so found, less the weight of the sieve, shall be considered to be the total weight of drained fruit.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4930 LABEL STATEMENT OF SUBSTANDARD FILL.**

If canned fruit cocktail falls below the standard of fill of container prescribed in part 1555.4920, the label shall bear the general statement of substandard fill specified in part 1550.0920, in the manner and form therein prescribed.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.4940 CANNED PINEAPPLE.**

"Canned pineapple" is the food prepared from one of the following optional forms of units obtained from peeled, cored, mature fruits of the pineapple plant:

A. Sliced, slices; consisting of whole circular slices cut across the axis of the peeled, cored fruit cylinders.

B. Half sliced, half slices; consisting of semicircular halves of slices; a unit that is approximately one-half slice is considered to be a half slice.

C. Broken sliced, broken slices; consisting of arc-shaped portions cut or broken from slices, which portions are not uniform in size or shape.

D. Tidbits; consisting of sectors cut from slices. Tidbits are reasonably uniform in size and shape; they are predominantly from 5/16 inch to one-half inch thick and, except for an occasional unit, each sector is not larger than one-sixth of the slice from which cut.

E. Chunks; consisting of short, thick pieces cut from thick slices or from peeled, cored fruit; chunks may or may not be symmetrical or uniform in shape and size. Predominantly, the units have a thickness greater than one-half inch, a width greater than 9/16 inch, but a longest dimension (along any edge) not greater than 1-1/2 inches.

F. Cubes, diced; consisting of cube-shaped pieces cut from slices or from peeled, cored fruit; except for an occasional unit, the longest dimension (along any edge) of each unit is not greater than 9/16 inch.

G. Spears, fingers; consisting of long, slender pieces cut parallel to the core axis from peeled, cored fruit cylinders; the units are not larger than one-sixth of the cylinder from which they are cut and they are not less than 2-1/2 inches long.

H. Crushed, consisting of shredded or finely cut pieces of fruit flesh.

The optional forms of units specified by items A to G are canned with one of the optional packing media specified in part 1555.4950. The optional form of unit specified by this item may be canned with one of the optional packing media specified in part 1555.4950, except water, or with one of the optional sweetening ingredients specified in part 1555.4960.

The food is sealed in containers and is so processed by heat, either before or after sealing, as to prevent spoilage.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.4950 OPTIONAL PACKING MEDIA.**

The optional packing media referred to in part 1555.4940 are: water; pineapple juice; clarified juice; light syrup; heavy syrup; extra heavy syrup.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.4955 PINEAPPLE JUICE; CLARIFIED JUICE.**

For the purposes of parts 1555.4940 to 1555.5000: pineapple juice conforms to the definition and standard of identity for unsweetened pineapple juice as specified in parts 1555.5060 to 1555.5100 except that it is not required to be separately sealed in containers and so processed by heat as to prevent spoilage. Clarified juice is the liquid collected from cutting various forms of units from pineapple fruits or the liquid expressed wholly or in part from pineapple cores, shells, or from pineapple flesh or parts thereof, which liquid is clarified and may be further refined or concentrated; but if the concentration is such that the packing medium conforms to the density range for one of the syrups hereinafter specified, such concentrated liquid is considered to be light syrup, heavy syrup or extra heavy syrup, as the case may be.

Except as the concentrated, clarified juice is considered to be a syrup packing medium as above provided, each of the packing media light syrup, heavy syrup, and extra heavy syrup consists of an optional sweetening ingredient as specified in part 1555.4960, dissolved in one or any mixture of two or more of the liquids water, pineapple juice, or clarified juice. The syrup packing media have respective densities as determined by the method specified in "Official Methods of Analysis of the Association of Official Agricultural Chemists", eighth edition, on page 533, under the heading "Solids-By Means of Spindle - Official," using the Brix hydrometer 15 days or more after the pineapple is canned, which are within the ranges specified for each in the following list:

##### **Brix measurement**

- A. light syrup, 14 degrees or more but less than 18 degrees;
- B. heavy syrup, 18 degrees or more but less than 22 degrees;
- C. extra heavy syrup, 22 degrees or more but not more than 35 degrees.

In the case of crushed pineapple, part 1555.4940, item H, the juice resulting from cutting or shredding the pineapple flesh is considered to be pineapple juice, without regard to whether it has or has not been drained away from the pieces of pineapple.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.4960 OPTIONAL SWEETENING INGREDIENTS.

The optional sweetening ingredients referred to in parts 1555.4940 and 1555.4955, are:

- A. sugar;
- B. invert sugar syrup;
- C. any mixture of optional sweetening ingredients designated in items A and B;
- D. any of the optional sweetening ingredients designated in items A, B, and C with dextrose, provided that the weight of the solids of dextrose does not exceed one-third of the total weight of the solids of the combined sweetening ingredients;
- E. any of the optional sweetening ingredients designated in items A, B, and C with corn syrup or with dried corn syrup or with glucose syrup or with dried glucose syrup or with any two or more of these, provided that the weight of the solids of corn syrup, dried corn syrup, glucose syrup, dried glucose syrup, or the sum of the weights of the solids of corn syrup, dried corn syrup, glucose syrup, and dried glucose syrup, in case two or more of these are used, does not exceed one-fourth of the total weight of the solids of the combined sweetening ingredients; and
- F. any mixture of the optional ingredients designated in items D and E.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.4970 DEFINITIONS.

Subpart 1. **Applicability.** For the purpose of parts 1555.4940 to 1555.5000, the following definitions apply.

Subp. 2. **Sugar.** The term "sugar" means refined sugar (sucrose.)

Subp. 3. **Invert sugar syrup.** The term "invert sugar syrup" means an aqueous solution of inverted or partly inverted, refined or partly refined sucrose, the solids of which contain not more than 0.3 percent by weight of ash and which is colorless, odorless, and flavorless except for sweetness.

Subp. 4. **Dextrose.** The term "dextrose" means the hydrated or anhydrous monosaccharide obtained from hydrolyzed starch.

Subp. 5. **Corn syrup and glucose syrup.** The term "corn syrup" means a clarified, concentrated aqueous solution of the products obtained by incomplete hydrolysis of cornstarch and includes dried corn syrup. The solids of corn syrup contain not less than 40 percent by weight of reducing sugars calculated as anhydrous dextrose. The term "glucose syrup" means a syrup that conforms to the definition in this subpart for corn syrup, except that it is made from any edible starch and includes dried glucose syrup.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.4980 NAMES.

The name of the canned pineapple prepared from each of the optional forms of pineapple ingredient specified in part 1555.4940 is as follows: if the optional form is one designated in part 1555.4940, items A to G, the name is "pineapple" preceded or followed, for each of the indicated optional forms of units, by the words here specified: "sliced" or "slices;" "half sliced" or "half slices;" "broken sliced" or "broken slices;" "tidbits;" "chunks;" "cubes" or "diced;" "spears" or "fingers."

If the optional form is one designated in part 1555.4940, item H, the name is "pineapple," preceded or followed by the word "crushed." If the crushed pineapple, when drained by the method specified in part 1555.5020, subpart 2 yields not less than 73 percent but less than 78 percent by weight of drained material, the word "crushed"

or the words "crushed pineapple" in the name of the food may be preceded or followed by the words "heavy pack" and if it yields 78 percent or more by weight of drained material the word "crushed" or the words "crushed pineapple" may be preceded or followed by the words "solid pack."

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.4990 OPTIONAL PACKING MEDIA LABELING.

The labels of canned pineapple prepared from the optional forms of pineapple specified in part 1555.4940, items A to G shall bear the name of the optional packing medium used as specified in part 1555.4950, preceded by "in" or "packed in." Whenever the optional packing medium pineapple juice is used, the words "pineapple juice" may be preceded by the word "unsweetened." The labels of crushed pineapple canned with the optional packing media specified in part 1555.4950, except water, shall bear the statement "in" or "packed in \_\_\_\_\_," the blank being filled in with the name of the optional packing medium used as specified in part 1555.4950, but in lieu of such statement crushed pineapple canned with pineapple juice may be labeled "unsweetened" and crushed pineapple canned with pineapple juice and sugar may be labeled "lightly sweetened" or "heavily sweetened" or "extra heavily sweetened," if the drained liquid conforms to the density ranges specified in part 1555.4955 for light syrup, heavy syrup or extra heavy syrup, respectively.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.5000 PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.

Wherever the name of the food appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the words and statements specified in parts 1555.4940 to 1555.5000, showing the optional ingredients used, shall conspicuously precede or follow the name, without intervening written, printed, or graphic matter, except that the adjectival designation of the state, territory, or possession of the United States or of the foreign country in which the pineapples were grown may intervene.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.5010 STANDARD OF QUALITY FOR CANNED PINEAPPLE.

Subpart 1. **General.** The standard of quality for canned pineapple is as follows in subparts 2 to 15.

Subp. 2. **Broken slices.** In the case of broken slices, not more than ten percent of the drained weight may consist of pieces having an arc of less than 90 degrees and not more than five percent of the drained weight of the contents of the container, as determined by the method prescribed in part 1555.5020, subpart 2: consists of pieces that measure in thickness less than 5/16 inch or more than one inch; or consists of pieces that measure less than three-fourths inch in width as measured from the outer edge to the inner edge.

Subp. 3. **Cubes or diced pineapple.** In the case of cubes or diced pineapple:

A. not more than ten percent of the drained weight consists of units of such size that they pass through the screen when tested by the method prescribed in part 1555.5020, subpart 3; and

B. not more than 15 percent of the drained weight consists of pieces weighing more than 3/32 ounce each.

Subp. 4. **Chunks.** In the case of chunks, not more than 15 percent of the drained weight consists of pieces weighing less than 3/16 ounce each.

Subp. 5. **Slices and spears; half slices.** In the case of slices and spears, the drained weight of the largest unit in the container is not more than 1.4 times the weight of the smallest. In the case of half slices, the drained weight of the largest unit in the container is not more than 1.75 times the weight of the smallest (except for an

occasional broken piece due to splitting or an occasional whole slice not quite completely cut through).

Subp. 6. **Broken slices.** In the case of broken slices, not more than five percent of the drained weight of the contents of the can consists of broken slices having an outside diameter differing by as much as three-eighths inch from that of those present in greatest proportion by weight.

Subp. 7. **Tidbits.** In the case of tidbits, not more than 15 percent of the drained weight consists of tidbits each of which weighs less than three-fourths as much as the average weight of all the untrimmed tidbits in the container.

Subp. 8. **Slices and half slices; units excessively trimmed.** In the case of slices and half slices, not more than 7-1/2 percent by count of the units in a container may be excessively trimmed, but in any container having not more than ten units, one unit may be excessively trimmed and in any container having more than ten units, but not more than 27 units, two units may be excessively trimmed. Such slices and half slices are excessively trimmed if the portion trimmed away exceeds five percent of the apparent physical bulk of the perfectly formed unit and if such trimming destroys the normal circular shape of the outer or inner edge of the unit.

Subp. 9. **Broken slices, spears, and tidbits; units excessively trimmed.** In the case of broken slices and spears, not more than 15 percent by count of the total units in the container and, in the case of tidbits, not more than 15 percent of the drained weight, consist of units excessively trimmed. Broken slices, spears, and tidbits are excessively trimmed if the normal shape of these units is destroyed by such trimming.

Subp. 10. **Slices, half slices, broken slices, spears, chunks, cubes, and tidbits; blemishes.** In the case of slices, half slices, broken slices, spears, chunks, cubes, and tidbits, not more than 12-1/2 percent by count of the units in any container may be blemished, but in containers having not more than five units, one unit may be blemished; in containers having more than five units but not more than ten units, two units may be blemished; and in containers having more than ten units, but not more than 32 units, four units may be blemished. Blemishes include:

A. any of the following, if in excess of 1/16 inch in the longest dimension on the exposed of the unit: eyes, pieces of shell, brown spots;

B. deep fruit eyes;

C. bruised portions; and

D. other abnormalities that it is possible to detect in good commercial practice before sealing in the containers.

Subp. 11. **Crushed pineapple; blemishes.** In the case of crushed pineapple, not more than 1-1/4 percent of the drained weight of the contents of the can consists of fragments bearing such blemishes.

Subp. 12. **Spears, slices and half slices, broken slices, chunks, tidbits; mashing.** In the case of spears, not more than one unit per container is mashed; in the case of slices and half slices, not more than one unit in containers of 25 units or less and not more than three units in containers of more than 25 units are mashed; in the case of broken slices, not more than five percent by count of the units in the container is mashed; in the case of chunks, not more than three of the units in containers of less than 70 units or five percent of the units in containers of 70 units or more is mashed; in the case of tidbits, not more than three of the units in containers of less than 150 units or two percent of the units in containers of 150 units or more, is mashed. (A unit that has lost its normal shape because of ripeness and which bears no mark of mechanical injury shall not be considered as mashed.)

Subp. 13. **All forms of canned pineapple; core.** In the case of all forms of canned pineapple, not more than 1.1 ounces of core is contained in one pound of drained fruit, as determined by the method prescribed in part 1555.5020, subpart 7.

Subp. 14. **All forms of canned pineapple; acid.** In the case of all forms of canned pineapple, not more than 1.35 grams of acid, as determined by the method prescribed

in part 1555.5020, subpart 8, and calculated as anhydrous citric acid, is contained in 100 milliliters of the liquid drained from the product 15 days or more after the pineapple is canned.

Subp. 15. **Crushed pineapple; drained weight.** In the case of crushed pineapple, the drained weight of pineapple, as determined by the method prescribed in part 1555.5020, subpart 2, is not less than 63 percent of the net weight of the contents of the container.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.5020 METHODS.

Subpart 1. **General.** The methods to be employed to determine whether canned pineapple meets the requirements of part 1555.5010 are as follows in subparts 2 to 8.

Subp. 2. **Drained weight of canned pineapple.** Determine the drained weight of the canned pineapple by the following procedure: pour the contents of the can on a round sieve made from No. 8 woven-wire cloth complying with the specifications for such cloth in Table I of "Standard Specifications for Sieves," published March 1, 1940, in L.C. 584 of the United States Department of Commerce, National Bureau of Standards. Use a sieve eight inches in diameter for containers of less than three pounds net contents and a sieve 12 inches in diameter for larger containers. Incline the sieve, without shifting the contents, to facilitate draining. Allow to drain for two minutes from the time the contents of the container are poured on the sieve. Immediately transfer the drained pineapple to a clean, dry, tared pan by inverting the sieve over the pan in one moderately rapid motion, and determine the weight of the drained pineapple. In the case of broken slices and spears, check the dimensions and weight of each unit against the requirements of part 1555.5010, subparts 2, 5, and 6. In the case of cubes, chunks, and tidbits, check the weight of the units against the requirements of part 1555.5010, subpart 3, item B and subparts 4 and 7.

Subp. 3. **Sieve test for cubes.** Test cubes for compliance with part 1555.5010, subpart 3, item A by placing the cubes, a few at a time, on the meshes of a sieve designated as 5/16 inch in Table I of "Standard Specifications for Sieves," described in subpart 2. After shaking gently, remove those that remain on the sieve before testing the next portion. Continue portion-wise until all units are tested, then determine the aggregate weight of those units that have passed through the sieve.

Subp. 4. **Units excessively trimmed.** Except in the case of cubes, chunks, and crushed pineapple, inspect all the units in the container to determine those that have been excessively trimmed, as defined in part 1555.5010, subpart 8 or 9.

Subp. 5. **Blemished fragments.** Except in the case of crushed pineapple, segregate and count each unit that is blemished, as defined in part 1555.5010, subpart 10. In the case of crushed pineapple, segregate each fragment of crushed pineapple bearing a blemish and determine the aggregate weight of such fragments to determine compliance with part 1555.5010, subpart 11.

Subp. 6. **Mashed units.** Except in the case of cubes and crushed pineapple, count the total units in the container and the number of mashed units, to determine compliance with part 1555.5010, subpart 12.

Subp. 7. **Core material.** In the case of each form of optional pineapple ingredient, identify and separate any core material cleanly from each of the units in the container and weigh the aggregate of such core material. Calculate the weight of the core material per pound of drained fruit to determine compliance with part 1555.5010, subpart 13.

Subp. 8. **Determination of total acidity of drained liquid.** Determine the total acidity of the drained liquid by titration, using the following method. Measure with a pipette ten milliliters of the unfiltered drained liquid into a 250 milliliter Erlenmeyer flask. Add 25 milliliters of freshly boiled distilled water and 0.3 milliliter of one percent phenolphthalein solution. Titrate with one-tenth normal sodium hydroxide solution to a faint permanently pink coloration. Multiply the number of milliliters of one-tenth



normal sodium hydroxide required by 0.064 to calculate the number of grams of anhydrous citric acid per 100 milliliters of drained liquid.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5030 LABEL STATEMENT OF SUBSTANDARD QUALITY.**

If the quality of canned pineapple falls below the standard prescribed in part 1555.5010, the label shall bear the general statement of substandard quality specified in part 1550.0920, in the manner and form therein specified. However, if the quality of canned pineapple falls below standard with respect to only one of the factors of quality specified in part 1555.5010, there may be substituted for the second line of such general statement of substandard quality a new line as specified below, after the number corresponding to each subpart of part 1555.5010 that such canned pineapple fails to meet, as follows:

- A. "small broken pieces" or "thick broken pieces," as the case may be;
- B. "irregular and mixed sizes," "irregular small pieces," "mixed sizes" (these words are to be used only where the cubes are of mixed sizes and the tolerance for units larger than maximum size is exceeded);
- C. "irregular small pieces";
- D. "mixed sizes";
- E. "mixed sizes";
- F. "mixed sizes";
- G. "excessively trimmed";
- H. "excessively trimmed";
- I. "blemished" or "contains blemished pieces";
- J. "blemished" or "contains blemished pieces";
- K. "mashed units" or "contains mashed units";
- L. "poorly cored" or "excessive core";
- M. "excessively tart"; and
- N. "contains excess liquid."

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5040 STANDARD OF FILL OF CONTAINER FOR CANNED CRUSHED PINEAPPLE.**

The standard of fill of container for canned crushed pineapple is a fill of not less than 90 percent of the total capacity of the container, as determined by the general method for fill of container prescribed in parts 1550.0900 to 1550.0910.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5050 LABEL STATEMENT OF SUBSTANDARD FILL.**

If canned crushed pineapple falls below the standard of fill of container prescribed in part 1555.5040, the label shall bear the general statement of substandard fill specified in part 1550.0920, in the manner and form therein specified.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5060 CANNED PINEAPPLE JUICE.**

"Canned pineapple juice" is the unconcentrated juice from the flesh or parts thereof or from the cores or from both such flesh and cores of mature pineapples. Canned pineapple juice may be extracted cold, or heat may be used in the extraction, but in neither case is water added. Canned pineapple juice contains finely divided insoluble solids, but it does not contain pieces of shell, seeds, or other coarse or hard substances. It may be sweetened with sugar. Before or after sealing in the container, canned pineapple juice is so processed by heat as to prevent spoilage.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5070 SUGAR.**

For the purposes of parts 1555.5060 to 1555.5100, the term "sugar" means refined sugar (sucrose).

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5080 NAME.**

The name of the food is "pineapple juice." If no sugar is added, the word "unsweetened" may immediately precede or follow the words "pineapple juice."

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5090 OPTIONAL SWEETENING INGREDIENT.**

If the optional sweetening ingredient sugar is used, the label shall bear the statement "sugar added."

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5100 LABEL STATEMENT OF OPTIONAL INGREDIENTS.**

Wherever the name of the food appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the words specified in parts 1555.5060 to 1555.5100, showing the optional ingredient used, shall conspicuously precede or follow the name, without intervening written, printed, or graphic matter, except that the adjectival designation of the state, territory or possession of the United States or of the foreign country in which the pineapples were grown may intervene.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5110 CANNED PINEAPPLE JUICE.**

The standard of quality for canned pineapple juice is as follows: the soluble solids content is not less than 10.5 degrees Brix, as determined by the method prescribed in part 1555.5120, item A. The acidity, as determined by the method prescribed in part 1555.5120, item B, is not more than 1.35 grams of anhydrous citric acid per 100 milliliters of the juice. The ratio of the degrees Brix to total acidity, as determined by the method prescribed in part 1555.5120, item C, is not less than 12. The quantity of finely divided "insoluble solids," as determined by the method prescribed in part 1555.5120, item D, is not less than five percent nor more than 30 percent.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5120 METHODS.**

The methods referred to in part 1555.5110 are as follows:

A. Determine the degrees Brix of the canned pineapple juice by the method prescribed in "Official Methods of Analysis of the Association of Official Agricultural Chemists," "Solids -- By Means of Spindle -- Official," eighth edition, page 533, section 29.9.

B. Determine the total acidity of the canned pineapple juice by titration by the method prescribed in part 1555.5020, subpart 8.

C. Divide the degrees Brix determined as prescribed in item A by the grams of anhydrous citric acid per 100 milliliters of juice, determined as prescribed in item B and report the results as ratio of degrees Brix to total acidity.

D. Determine the quantity of "insoluble solids" in canned pineapple juice as follows: measure 50 milliliters of thoroughly stirred pineapple juice into a cone-shaped graduated tube of the long-cone type, measuring approximately 4-3/16 inches from tip to top calibration and having a capacity of 50 milliliters. Place the tube in a suitable centrifuge the approximate speed of which is related to diameter of swing in accordance with the table immediately below. The word "diameter" means the overall distance between the tips of opposing centrifuge tubes in operating position.

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Diameter (inches)	Approximate revolutions per minute
10	1,609
10-1/2	1,570
11	1,534
11-1/2	1,500
12	1,468
12-1/2	1,438
13	1,410
13-1/2	1,384
14	1,359
14-1/2	1,336
15	1,313
15-1/2	1,292
16	1,271
16-1/2	1,252
17	1,234
17-1/2	1,216
18	1,199
18-1/2	1,182
19	1,167
19-1/2	1,152
20	1,127

The milliliter reading at the top of the layer of "insoluble solids," after centrifuging three minutes, is multiplied by two to obtain the percentage of "insoluble solids."

**Statutory Authority:** *MS s 31.10; 31.101*

### **1555.5130 LABEL STATEMENT OF SUBSTANDARD QUALITY.**

If the quality of canned pineapple juice falls below the standard prescribed in part 1555.5110, the label shall bear the general statement of substandard quality specified in part 1550.0920, in the manner and form therein specified.

**Statutory Authority:** *MS s 31.10; 31.101*

### **1555.5140 STANDARD OF FILL OF CONTAINER FOR CANNED PINEAPPLE JUICE.**

The standard of fill of container for canned pineapple juice is a fill of not less than 90 percent of the total capacity of the container, as determined by the general method for fill of container prescribed in parts 1550.0900 to 1550.0910.

**Statutory Authority:** *MS s 31.10; 31.101*

### **1555.5150 LABEL STATEMENT OF SUBSTANDARD FILL.**

If canned pineapple juice falls below the standard of fill of container prescribed in part 1555.5140, the label shall bear the statement of substandard fill specified in part 1550.0920, in the manner and form therein specified.

**Statutory Authority:** *MS s 31.10; 31.101*

### **1555.5160 CANNED PRUNE JUICE.**

"Canned prune juice" is the food prepared from a water extract of dried prunes and contains not less than 18.5 percent by weight of water-soluble solids extracted from dried prunes. The quantity of prune solids may be adjusted by the concentration or dilution or both of the water extract or extracts made. Such food may contain one or more of the optional acidifying ingredients specified in part 1555.5170, in a quantity

sufficient to render the food slightly tart. Such food is sealed in a container and so processed by heat, before or after sealing, as to prevent spoilage.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.5170 OPTIONAL ACIDIFYING INGREDIENTS.**

The optional acidifying ingredients referred to in part 1555.5160 are lemon juice, lime juice, and citric acid.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.5180 LABEL DECLARATION OF NAME OF FOOD.**

The name of the food is "prune juice -- a water extract of dried prunes."

For the purposes of the federal Food, Drug and Cosmetic Act concerning the label declaration of the name of the food, the explanatory statement "a water extract of dried prunes" may appear immediately below the words "prune juice," but there shall be no intervening written, printed, or graphic matter and the type used for the words "a water extract of dried prunes" shall be of the same style and not less than half the point size of the type used for the words "prune juice."

When one or more of the acidifying ingredients specified in part 1555.5170 are used, the label shall bear the statement "\_\_\_\_\_ added" or "with added \_\_\_\_\_," the blank being filled in with the name or names of the optional ingredients used.

Wherever the name of the food appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the words specified in this part, showing the optional ingredients used, shall immediately and conspicuously precede or follow such name, without intervening written, printed, or graphic matter.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.5210 CANNED FIGS.**

"Canned figs" is the food prepared from one of the optional fig ingredients specified in part 1555.5220 and one of the optional packing media specified in parts 1555.5230 to 1555.5250 to which citric acid or lemon juice or concentrated lemon juice is added, if necessary, in such quantity as to reduce the pH of the finished product to 4.9 or below. One or more of the following optional ingredients may be added to flavor, garnish, or season the canned figs:

- A. spice;
- B. flavoring, other than artificial flavoring;
- C. a vinegar;
- D. unpeeled segments of citrus fruits; and
- E. salt.

Such food is sealed in a container and so processed by heat as to prevent spoilage.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.5220 OPTIONAL FIG INGREDIENTS.**

The optional fig ingredients referred to in part 1555.5210 are prepared from mature figs of the light or dark varieties. Figs (or whole figs), split figs (or broken figs), or any combination thereof are optional fig ingredients. A fig (whole fig) is one that is whole or only slightly cracked and retains its natural conformation without exposing the interior. A split fig (or broken fig) is one that is open to such an extent that the seed cavity is exposed, the shape of the fruit may be distorted, and the fruit may or may not be broken apart into entirely separate pieces.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5230 OPTIONAL PACKING MEDIA.**

The optional packing media referred to in part 1555.5210 are: water; light syrup; heavy syrup; extra heavy syrup.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5240 LIQUID INGREDIENT AND SACCHARINE INGREDIENT.**

Each of the packing media in part 1555.5230, except water, is prepared with a liquid ingredient and a saccharine ingredient. Water is the liquid ingredient from which these packing media are prepared. The saccharine ingredient from which the packing media are prepared is one of the following: sugar; any combination of sugar and dextrose in which the weight of the solids of the dextrose used is not more than one-half the weight of the solids of the sugar used; any combination of sugar and corn syrup or glucose syrup in which the weight of the solids of the corn syrup or glucose syrup used is not more than one-third the weight of the solids of the sugar used; or any combination of sugar, dextrose, and corn syrup or glucose syrup in which twice the weight of the solids of the dextrose used added to three times the weight of the solids of the corn syrup or glucose syrup used is not more than the weight of the solids of the sugar used.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5250 DENSITIES.**

The respective densities of packing media light syrup, heavy syrup, and extra heavy syrup, as measured on the Brix hydrometer 15 days or more after the figs are canned, are within the range prescribed for each in the following list:

Brix measurement

- A. light syrup, 16 degrees or more but less than 21 degrees;
- B. heavy syrup, 21 degrees or more but less than 26 degrees; and
- C. extra heavy syrup, 26 degrees or more but less than 35 degrees.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5260 DEFINITIONS.**

Subpart 1. **Applicability.** For the purposes of parts 1555.5210 to 1555.5280, the following definitions apply.

Subp. 2. **Sugar and invert sugar syrup.** The term "sugar" means refined sucrose or invert sugar syrup. The term "invert sugar syrup" means an aqueous solution of inverted or partly inverted, refined or partly refined sucrose, the solids of which contain not more than 0.3 percent by weight of ash and which is colorless, odorless, and flavorless except for sweetness.

Subp. 3. **Dextrose.** The term "dextrose" means the hydrated or anhydrous, refined monosaccharide obtained from hydrolyzed starch.

Subp. 4. **Corn syrup.** The term "corn syrup" means a clarified, concentrated aqueous solution of the products obtained by the incomplete hydrolysis of cornstarch and includes dried corn syrup. The solids of corn syrup and of dried corn syrup contain not less than 40 percent by weight of reducing sugars calculated as anhydrous dextrose.

Subp. 5. **Glucose syrup and dried glucose syrup.** The term "glucose syrup" means a clarified, concentrated aqueous solution of the products obtained by the incomplete hydrolysis of any edible starch. The solids of glucose syrup contain not less than 40 percent by weight of reducing sugars calculated as anhydrous dextrose. "Dried glucose syrup" means the product obtained by drying "glucose syrup."

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5270 LABEL STATEMENT OF OPTIONAL INGREDIENTS.**

The label shall name the optional fig ingredient used, as specified in part 1555.5220. Where combinations of figs and split figs are used, the ingredient present in larger proportion by weight shall be named first and the name whereby the optional packing medium is designated in part 1555.5230, preceded by "in" or "packed in." When any of the optional ingredients permitted by part 1555.5210 is used the label shall bear the words set forth in the corresponding item of this part:

A. "spiced" or "spice added" or "with added spice" or in lieu of the word "spice," the common name of the spice;

B. "flavoring added" or "with added flavoring" or, in lieu of the word "flavoring," the common name of the flavoring;

C. "seasoned with vinegar" or "seasoned with \_\_\_\_\_ vinegar," the blank being filled in with the name of the vinegar used;

D. "with added \_\_\_\_\_," the blank being filled in with the name or names of the citrus segment or segments used;

E. "seasoned with salt" or "salt added." When the addition of lemon juice (including concentrated lemon juice) or citric acid lowers the pH of the canned figs to less than 4.3, the label shall bear the statement "with added lemon juice" or "with added concentrated lemon juice" (if such is used) or "with added citric acid."

When two or more of the optional ingredients specified in part 1555.5210 are used, such words may be combined, as for example, "with added spices, orange slices, and lemon juice."

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5280 PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.**

Wherever the name of the food appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the words specified in parts 1555.5210 to 1555.5270 showing the optional ingredients used, shall immediately and conspicuously precede or follow such name without intervening written, printed, or graphic matter, except that the varietal name of the figs may so intervene.

**Statutory Authority:** *MS s 31.10; 31.101*

**CANNED VEGETABLES****1555.5290 CANNED PEAS.**

"Canned peas" is the food prepared from one of the following optional pea ingredients:

A. shelled, succulent peas (*Pisum sativum*) of Alaska or other smooth-skinned varieties;

B. shelled, succulent peas (*Pisum sativum*) of sweet, wrinkled varieties;

C. shelled, dried peas (*Pisum sativum*) of Alaska or other smooth-skinned varieties; or

D. shelled, dried peas (*Pisum sativum*) of sweet, wrinkled varieties.

To one such optional pea ingredient water is added.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5300 OPTIONAL INGREDIENTS.**

The following optional ingredients may be used:

A. salt, monosodium glutamate, sugar, dextrose, spice, flavoring, or artificial coloring; and

B. in the case the optional pea ingredient in item A or B of part 1555.5290 is used, sodium carbonate, sodium bicarbonate, sodium hydroxide, calcium hydroxide, magnesium hydroxide, magnesium oxide, or magnesium carbonate, or any mixture or

combination of them in such quantity that the pH of the finished canned peas is not more than eight, as determined by the glass electrode method for the hydrogen ion concentration.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.5310 OPTIONAL SEASONINGS.**

The food may be seasoned with one or more of the following optional seasonings: green peppers, mint leaves, onions, garlic, or horseradish.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.5320 SEALING AND PROCESSING.**

The food is sealed in a container and so processed by heat as to prevent spoilage.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.5330 OPTIONAL INGREDIENTS LABELING.**

The label shall name the optional pea ingredient present by the use of the word or words "early" or "June" or "early June," "sweet" or "sweet wrinkle" or "sugar," "dried early" or "dried June" or "dried early June," "dried sweet" or "dried sweet wrinkled" or "dried sugar."

If spice is present, the label shall bear the word or words "spiced" or "with added spice" or "spice added." If flavoring is present, the label shall bear the words "with added flavoring" or "flavoring added." If artificial coloring is present, the label shall state that fact in such manner and form as is provided in part 1555.5370. If an optional seasoning ingredient is used, the label shall bear the words "seasoned with green peppers," "seasoned with mint leaves," "seasoned with garlic," or "seasoned with horseradish," as the case may be. If one or more of the optional ingredients named in part 1555.5300, item B is used, the label shall bear the statement "traces of \_\_\_\_\_ added," the blank to be filled in with the names of the ingredients used; but in lieu of such statement the label may bear the statement "traces of alkalis added." If monosodium glutamate is used, the label shall bear the statement "monosodium glutamate added" or "with added monosodium glutamate."

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.5340 PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.**

Wherever the name "peas" appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the words and statements specified in parts 1555.5290 to 1555.5330, showing the optional ingredients present, shall immediately and conspicuously precede or follow such name without intervening written, printed, or graphic matter, except that the specific varietal name of the peas may so intervene.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.5350 STANDARD OF QUALITY FOR CANNED PEAS.**

The standard of quality for canned peas is as follows:

- A. not more than four percent by count of the peas in the container are spotted or otherwise discolored;
- B. standard canned peas are normally colored, not artificially colored;
- C. the combined weight of pea pods and other harmless extraneous vegetable material is not more than one-half of one percent of the drained weight of peas in the container;
- D. the weight of pieces of peas is not more than ten percent of the drained weight of peas in the container;
- E. the skins of not more than 25 percent by count of the peas in the container are ruptured to a width of 1/16 inch or more;

F. not less than 90 percent by count of the peas in the container are crushed by a weight of not more than 907.2 grams (two pounds); and

G. the alcohol-insoluble solids of Alaska or other smooth-skinned varieties of peas in the container, is not more than 23.5 percent and of sweet, wrinkled varieties, not more than 21 percent.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.5360 METHODS OF TESTING.

Canned peas shall be tested by the following methods to determine whether or not they meet the requirements of part 1555.5350:

A. After determining the fill of the container as prescribed in part 1555.5380, distribute the contents of the container over the meshes of a circular sieve made with No. 8 woven-wire cloth which complies with the specification for such cloth set forth on page 3 of "Standard Specifications for Sieves," published October 25, 1938, by the United States Department of Commerce, National Bureau of Standards. The diameter of the sieve used is eight inches if the quantity of the contents of the container is less than three pounds or 12 inches if such quantity is three pounds or more. Without shifting the peas, so incline the sieve as to facilitate drainage. Two minutes from the time drainage begins, remove the peas from the sieve and weigh them. Such weight shall be considered to be the drained weight of the peas.

B. From the drained peas obtained in item A, promptly segregate and weigh the pea pods and other harmless extraneous vegetable material and the pieces of peas.

C. From the drained peas obtained in item A, take at random a subdivision of 100 to 150 peas and count them. Immediately cover these peas with a portion of the liquid obtained in item A and add the remaining liquid to the drained peas from which the subdivision was taken. Count those peas in the subdivision which are spotted or otherwise discolored and also those peas the skins of which are ruptured to a width of 1/16 inch or more.

D. Immediately after each pea is examined by the method prescribed in item C, test it by removing its skin, placing one of its cotyledons, with flat surface down, on the approximate center of the level, smooth surface of a rigid plate, lowering a horizontal disc to the highest point of the cotyledon and measuring the height of the cotyledon. The disc is of rigid material and is affixed to a rod held vertically by a support through which the rod can freely move upward or downward. The lower face of the disc is a smooth, plane surface horizontal to the vertical axis of the rod. A device to which weight may be added is affixed to the upper end of the rod. Before lowering the disc to the cotyledon, adjust the combined weight of disc, rod, and device to 100 grams. After measuring the height of the cotyledon and shifting the plate, if necessary, so that the cotyledon is under the approximate center of the disc, add weight to the device at a uniform, continuous rate of 12 grams per second until the cotyledon is pressed to one-fourth its previously measured height or until the combined weight of disc, rod, and device is 907.2 grams (two pounds). A pea so tested shall be considered to be crushed when its cotyledon is pressed to one-fourth its original height.

E. Drain the liquid from the peas which remained after taking the subdivision as prescribed in item C. Transfer the peas to a pan and rinse them with a volume of water equal to twice the capacity of the container from which such peas were drained in item A. Immediately drain the peas again by the method prescribed in item A. After the two minutes draining, wipe the moisture from the bottom of the sieve. Commingle the peas thus drained, stir them to a uniform mixture and weigh 20 grams of such mixture into a 600 cubic centimeters beaker. Add 300 cubic centimeters of 80 percent alcohol (by volume), stir, cover beaker, and bring to a boil. Simmer slowly for 30 minutes. Fit a Buchner funnel with a previously prepared filter paper of such size that its edges extend one-half inch or more up the vertical sides of the funnel. The previous preparation of the filter paper consists of drying it in a flat-bottomed dish for two hours at 100 degrees Celsius, covering the dish with a tight fitting cover, cooling it in a desiccator and promptly weighing. After the filter paper is fitted to the funnel apply



suction and transfer the contents of the beaker to the funnel. Do not allow any of the material to run over the edge of the paper. Wash the material on the filter with 80 percent alcohol (by volume) until the washings are clear and colorless. Transfer the filter paper with the material retained thereon to the dish used in preparing the filter paper. Dry the material in a ventilated oven, without covering the dish, for two hours at 100 degrees Celsius. Place the cover on the dish, cool it in a desiccator, and promptly weigh. From this weight, subtract the weight of the dish, cover, and paper, as previously found. The weight in grams thus obtained, multiplied by five, shall be considered to be the percent of alcohol-insoluble solids.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.5370 LABEL STATEMENT OF SUBSTANDARD QUALITY.**

If the quality of canned peas falls below the standard prescribed in part 1555.5350, the label shall bear the general statement of substandard quality specified in part 1550.0920, in the manner and form therein specified; but in lieu of such general statement of substandard quality when the quality of canned peas falls below the standard in only one respect, the label may bear the alternative statement "below standard in quality \_\_\_\_\_," the blank to be filled in with the words specified in the item of this part corresponding to the item of part 1555.5350 which such canned peas fail to meet, as follows:

- A. "excessive discolored peas";
- B. "artificially colored";
- C. "excessive foreign material";
- D. "excessive broken peas";
- E. "excessive cracked peas";
- F. "not tender"; or
- G. "excessively mealy."

Such alternative statement shall immediately and conspicuously precede or follow, without intervening written, printed, or graphic matter, the name "peas" and any words and statements required or authorized to appear with such name by parts 1555.5350 to 1555.5370.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.5380 STANDARD OF FILL OF CONTAINER FOR CANNED PEAS.**

The standard of fill of container for canned peas is a fill such that, when the peas and liquid are removed from the container and returned thereto, the leveled peas (irrespective of the quantity of the liquid), 15 seconds after they are so returned completely fill the container. A container with lid attached by double seam shall be considered to be completely filled when it is filled to the level 3/16 inch vertical distance below the top of the double seam; and a glass container shall be considered to be completely filled when it is filled to the level one-half inch vertical distance below the top of the container.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.5390 LABEL STATEMENT OF SUBSTANDARD FILL.**

If the canned peas fall below the standard of fill of container prescribed in part 1555.5380, the label shall bear the general statement of substandard fill specified in part 1550.0920, in the manner and form therein specified.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.5400 CANNED GREEN BEANS.**

"Canned green beans" is the food prepared from stemmed, succulent pods of the green bean plant and water. It may be seasoned with salt, monosodium glutamate,

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sugar, or dextrose or any two or all of these. The pods are prepared in one or more of the following forms:

A. whole pods, including pods which after removal of either or both ends are less than 2-3/4 inches in length or transversely cut pods not less than 2-3/4 inches in length. There may be present such broken pieces of pods as normally occur in the commercial packing of such product;

B. pods sliced lengthwise;

C. pods cut transversely into pieces less than 2-3/4 inches in length but not less than three-fourth inch in length, with or without shorter end pieces resulting therefrom;

D. pieces of pods of which not less than 75 percent by count are less than three-fourth inch in length and not more than one percent by count are more than 1-1/4 inches in length.

Any such form is an optional ingredient. Mixtures of two or more optional ingredients may be used. The food is sealed in a container and so processed by heat as to prevent spoilage.

**Statutory Authority:** *MS s 31.10; 31.101*

### 1555.5410 OPTIONAL INGREDIENTS LABELING.

When optional ingredient specified in part 1555.5400, item A is used the label shall bear the word "whole." If the pods are packed parallel to the sides of the container the word "whole" shall be preceded or followed by the words "vertical pack," except that when the pods are cut at both ends and are of substantially equal lengths, the words "asparagus style" may be used in lieu of the words "vertical pack."

When optional ingredient specified in part 1555.5400, item B is used the label shall bear the words "sliced lengthwise" or "french style."

When optional ingredient specified in part 1555.5400, item C is used the label shall bear the word "cut" or "cuts."

When optional ingredient specified in part 1555.5400, item D is used the label shall bear the words "short cut" or "short cuts," "\_\_\_ inch cut" or "\_\_\_ inch cuts," the blank to be filled in with the fraction of an inch which denotes the approximate length of the pieces.

When a mixture of two or more of the optional ingredients specified in part 1555.5400 is used, the label shall bear the statement "mixture of \_\_\_\_\_," the blank to be filled in with the combination of the names "whole," "sliced lengthwise," "cut," "cuts," and "short cut" or "short cuts" designating the optional ingredients present and arranged in the order of predominance, if any, by weight of such ingredients.

If monosodium glutamate is used, the label shall bear the statement "monosodium glutamate added" or "with added monosodium glutamate."

**Statutory Authority:** *MS s 31.10; 31.101*

### 1555.5420 PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.

Wherever the name "green beans" appears on the label so conspicuously as to be easily seen under the customary conditions of purchase, the words and statements prescribed by part 1555.5410 shall immediately and conspicuously precede or follow such name, without intervening written, printed, or graphic matter, except that there may intervene the designation of the length of cut; the varietal name, which may include the word "stringless," where the beans are in fact stringless; and the description of the green beans as "stringless," which may also be used between the words "green" and "beans," where the beans are in fact stringless.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5430 STANDARD OF QUALITY OF CANNED GREEN BEANS.**

The standard of quality of canned green beans is as follows when tested by the method prescribed in part 1555.5440.

A. In the case of cut beans (part 1555.5400, item C) and mixtures of two or more of the optional ingredients specified in part 1555.5400, not more than 60 units per 12 ounces drained weight are less than one-half inch long; provided that where the number of units per 12 ounces drained weight exceed 240, not more than 25 percent by count of the total units are less than one-half inch long.

B. The trimmed pods contain not more than 25 percent by weight of seed and pieces of seed.

C. In case there are present pods or pieces of pods 27/64 inch or more in diameter, there are not more than 12 strings per 12 ounces of drained weight which will support one-half pound for five seconds or longer.

D. The deseeded pods contain not more than 0.15 percent by weight of fibrous material.

E. There are not more than eight percent by count of blemished units. A unit is considered blemished when the aggregate blemished area exceeds the area of a circle one-eighth inch in diameter.

F. There are not more than six unstemmed units per 12 ounces of drained weight.

G. The combined weight of loose seed and pieces of seed is not more than five percent of the drained weight. This provision does not apply in case the green bean ingredient is pods sliced lengthwise (part 1555.5400, item B).

H. The combined weight of leaves, detached stems, and other extraneous vegetable matter is not more than 0.6 ounce per 60 ounces drained weight.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5440 METHOD OF TESTING.**

Subpart 1. **Directions.** Canned green beans shall be tested by the following method to determine whether they meet the requirements of part 1555.5430:

A. Distribute the contents of the container over the meshes of a circular sieve which has been previously weighed. The diameter of the sieve is eight inches if the quantity of the contents of the container is less than three pounds and 12 inches if such quantity is three pounds or more. The bottom of the sieve is woven-wire cloth which complies with the specifications for such cloth set forth under "2380 Micron (No. 8)" in Table 8 of "Standard Specifications for Sieves," published March 1, 1940, in L.C. 584 of the United States Department of Commerce, National Bureau of Standards. Without shifting the material on the sieve, so incline the sieve as to facilitate drainage. Two minutes from the time drainage begins, weigh the sieve and the drained material. Record, in ounces, the weight so found, less the weight of the sieve, as the drained weight.

B. Pour the drained material from the sieve into a flat tray and spread it in a layer of fairly uniform thickness. Count the total number of units. For the purpose of this count, loose seed, pieces of seed, loose stem, and extraneous material are not to be included. Divide the number of units by the drained weight recorded in item A and multiply by 12 to obtain the number of units per 12 ounces drained weight.

C. Examine the drained material in the tray, counting and recording the number of blemished units, number of unstemmed units, and, in case the material consists of the optional ingredient specified in part 1555.5430, item C or a mixture of two or more of the optional ingredients specified in part 1555.5400, count and record the number of units which are less than one-half inch long. If the number of units per 12 ounces is 240 or less, divide the number of units which are less than one-half inch long by the drained weight recorded in item A and multiply by 12 to obtain the number of such units per 12 ounces drained weight. If the number of units per 12 ounces exceeds 240, divide the number of units less than one-half inch long by the total

number of units and multiply by 100 to determine the percentage by count of the total units which are less than one-half inch long. Divide the number of blemished units by the total number of units in the container and multiply by 100 to obtain the percentage by count of blemished units in the container. Divide the number of unstemmed units by the drained weight recorded in item A and multiply by 12 to obtain the number of unstemmed units per 12 ounces of drained weight.

D. Except in the case of pods sliced lengthwise remove the loose seed and pieces of seed, weigh, record weight, and return to tray. Divide the weight of loose seed and pieces of seed by the drained weight recorded in item A and multiply by 100 to obtain the percentage by weight of loose seed and pieces of seed in the drained material.

E. Remove from the tray the extraneous vegetable material, weigh, record weight, and return to tray.

F. Remove from the tray one or more representative samples of 3-1/2 to four ounces, covering each sample as taken to prevent evaporation. If the tray includes pods or pieces of pods 27/64 inch or more in diameter, weigh and record weight in ounces of each representative sample.

G. From each representative sample selected in item F discard any loose seed and extraneous vegetable material and detach and discard any attached stems. Except with optional ingredient specified in part 1555.5400, item B, pods sliced lengthwise, trim off, as far as the end of the space formerly occupied by the seed, any portion of pods from which seed have become separated. Remove and discard any portions of seed from the trimmings and reserve the trimmings for item I. Weigh and record the weight of the trimmed pods. Deseed the trimmed pods and reserve the deseeded pods for item I. If the original container contained pods 27/64 inch or more in diameter, remove strings from the pods during the deseeding operation. Reserve these strings for testing as prescribed in item H. Collect the seed on a sieve of mesh fine enough to retain them, and so distribute them that any liquid drains away. Weigh the seed, divide by the weight of the trimmed pods, and multiply by 100 to obtain the percentage by weight of seed in the trimmed pods. In the case of pods sliced lengthwise, remove seed and pieces of seed or reserve the deseeded pods for use as prescribed in item I.

H. If strings have been removed for testing, as prescribed in item G, test them as follows. Fasten clamp, weighted to one-half pound, to one end of the string, grasp the other end with the fingers (a cloth may be used to aid in holding the string), and lift gently. Count the string as tough if it supports the one-half pound weight for at least five seconds. If the string breaks before five seconds, test such parts into which it breaks as are one-half inch or more in length and if any such part of the string supports the one-half pound weight for at least five seconds count the string as tough. Divide the number of tough strings by the weight of the sample recorded in item F and multiply by 12 to obtain the number of tough strings per 12 ounces drained weight.

I. Combine the deseeded pods with the trimmings reserved in item G and, if strings were tested as prescribed in item H, add such strings, broken or unbroken. Weigh and record weight of combined material. Transfer to the metal cup of a malted milk stirrer and mash with a pestle. Wash material adhering to the pestle back into cup with 200 cubic centimeters of boiling water. Bring mixture nearly to a boil, add 25 cubic centimeters of 50 percent (by weight) sodium hydroxide solution and bring to a boil. (If foaming is excessive, one cubic centimeter of capryl alcohol may be added.) Boil for five minutes, then stir for five minutes with a malted milk stirrer capable of a no-load speed of at least 7200 rpm. Use a rotor with two scalloped buttons shaped as shown in the diagram in subpart 2. Transfer the material from the cup to a previously weighed 30-mesh monel metal screen having a diameter of about 3-1/2 to four inches and side walls about one inch high and wash fiber on the screen with a stream of water using a pressure not exceeding a head (vertical distance between upper level of water and outlet of glass tube) of 60 inches, delivered through a glass tube three inches long and one-eighth inch inside diameter inserted into a rubber tube of one-fourth inch inside diameter. Wash the pulpy portion of the material through the screen and continue

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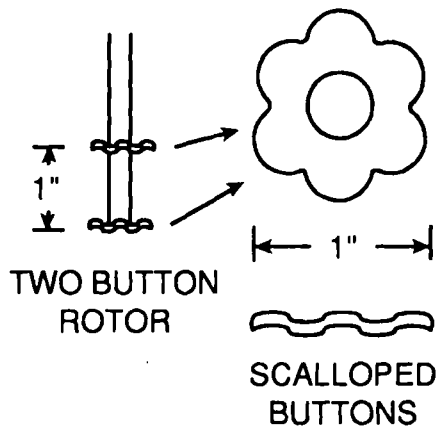
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washing until the remaining fibrous material, moistened with phenolphthalein solution, does not show any red color after standing five minutes. Again wash to remove phenolphthalein. Dry the screen containing the fibrous material for two hours at 100 degrees Celsius, cool, weigh, and deduct weight of screen. Divide the weight of fibrous material by the weight of combined deseeded pods, trimmings, and strings and multiply by 100 to obtain the percentage of fibrous material.

J. If the drained weight recorded in item A was less than 60 ounces, open and examine separately for extraneous material, as directed in item E, additional containers until a total of not less than 60 ounces of drained material is obtained. To determine the combined weight of extraneous vegetable material per 60 ounces of drained weight, total the weights of extraneous vegetable material found in all containers opened, divide this sum by the sum of the drained weights in these containers, and multiply by 60.

### Subp. 2. Diagram.



**Statutory Authority:** *MS s 31.10; 31.101*

### 1555.5450 LABEL STATEMENT OF SUBSTANDARD QUALITY.

If the quality of the canned green beans falls below the standard of quality prescribed by part 1555.5430, the label shall bear the general statement of substandard quality specified in part 1550.0920, in the manner and form therein specified, but in lieu of the words prescribed for the second line inside the rectangle the following words may be used, when the quality of canned green beans falls below the standard in only one of the following respects:

A. "Excessive number very short pieces," if the canned green beans fail to meet the requirements of part 1555.5430, item A;

B. "Excessive number blemished units," if they fail to meet the requirements of part 1555.5430, item E;

C. "Excessive number unstemmed units," if they fail to meet the requirements of part 1555.5430, item F; or

D. "Excessive foreign material," if they fail to meet the requirements of part 1555.5430, item H.

**Statutory Authority:** *MS s 31.10; 31.101*

### 1555.5455 CANNED WAX BEANS.

Canned wax beans conform to the definition and standard of identity and are subject to the requirements for label statement of optional ingredients prescribed for

canned green beans by parts 1555.5400 and 1555.5410, except that it is prepared from stemmed, succulent pods of the wax bean plant.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5460 PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.**

Wherever the name "wax beans" appears on the label so conspicuously as to be easily seen under the customary conditions of purchase, the words and statements prescribed by part 1555.5455 shall immediately and conspicuously precede or follow such name, without intervening written, printed, or graphic matter, except that there may intervene the designation of the length of cut, the varietal name, which may include the word "stringless" where the beans are in fact stringless, and the description of the wax beans as "stringless," which may also be used between the words "wax" and "beans," where the beans are in fact stringless.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5470 STANDARD OF QUALITY FOR CANNED WAX BEANS.**

The standard of quality for canned wax beans is that prescribed for canned green beans by parts 1555.5380 and 1555.5390.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5480 LABEL STATEMENT OF SUBSTANDARD QUALITY.**

If the quality of canned wax beans falls below the standard of quality prescribed by part 1555.5470, the label shall bear the statement of substandard quality in the manner and form specified in part 1555.5450 for canned green beans.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5490 CANNED CORN, CANNED SWEET CORN, CANNED SUGAR CORN.**

"Canned corn," "canned sweet corn," "canned sugar corn" is the food consisting of one of the corn ingredients specified in part 1555.5500, with water necessary for proper preparation and processing. It may be seasoned or garnished with one or more of the following optional ingredients:

- A. salt;
- B. monosodium glutamate;
- C. sugar (sucrose); and
- D. pieces of sweet red peppers or sweet green peppers or hot red peppers or hot green peppers or a mixture of any two or more of these.

It is sealed in a container and so processed by heat as to prevent spoilage.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5500 CORN INGREDIENTS.**

The corn ingredients referred to in part 1555.5490 consist of succulent sweet corn of the white or yellow color groups or mixtures of these and are as follows:

- A. cut kernels from which the hulls have not been separated;
- B. pieces of the inner portion of the corn kernel substantially free from hull;
- C. ground kernels from which the hulls have not been separated;
- D. a mixture of the form described in item A with one or both of the forms described in items B and C. When necessary to ensure smoothness, starch may be added in a quantity not more than sufficient for that purpose; and

E. cut and cooked kernels from which most of the moisture has been evaporated. In preparing each of the foregoing corn ingredients, the tip caps are removed.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5510 DESCRIPTIVE LABELING FOR CANNED CORN.**

The name of the food is "corn" or "sweet corn" or "sugar corn" with the name of the color group used, "white," "yellow," or "golden," or with the names of the color groups used, "white and yellow" or "white and golden," when the white color group predominates and "yellow and white" or "golden and white," when the yellow color group predominates and with:

A. The words "whole kernel" or "whole grain," when the corn ingredient specified in part 1555.5500, item A is used. When the weight of the liquid in the container as determined by the method prescribed in part 1555.5590, item A is not more than 20 percent of the net weight, and the container is closed under conditions creating a high vacuum in the container, the words "vacuum pack" or "vacuum packed" are also part of the name.

B. The word "fritter," when the corn ingredient specified in part 1555.5500, item B is used.

C. The word "ground," when the corn ingredient specified in part 1555.5500, item C is used.

D. The words "cream style," when the corn ingredient specified in part 1555.5500, item D is used.

E. The word "evaporated," when the corn ingredient specified in part 1555.5500, item E is used.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5520 PARTS OF NAME.**

The parts of the name as specified in part 1555.5510 may be arranged in any order of precedence. The varietal name of the corn used may intervene between parts of the name of the food. For the purpose of arrangement of the name, the words "sweet" and "corn" may be treated as separate parts of the name. When the varietal name immediately precedes or follows the name or intervenes between parts of the name of the food and it accurately designates the color of the corn ingredient, no other designation of the color group need be made.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5530 OPTIONAL SEASONING INGREDIENTS LABELING.**

When the optional seasoning or garnishing ingredient specified in part 1555.5490, item D is used, the label shall bear the words "with \_\_\_\_\_ peppers," the blanks being filled in with the words "red" or "green" or both, to show the color of peppers used and "sweet" or "hot" or both, to show the kind of peppers used, as for example "with green sweet peppers" or "with hot red peppers."

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5540 MONOSODIUM GLUTAMATE.**

If monosodium glutamate is used, the label shall bear the statement "monosodium glutamate added" or "with added monosodium glutamate."

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5550 OPTIONAL STARCH INGREDIENT.**

When the optional starch ingredient specified in part 1555.5500, item D is used, the label shall bear the statement "starch added to ensure smoothness."

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5560 PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.**

Wherever the name of the food appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the words and statements prescribed by parts 1555.5530 to 1555.5550 shall immediately and conspicuously precede or

follow such name, without intervening written, printed, or graphic matter, except that the varietal name of the corn used may so intervene.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.5570 STANDARD OF QUALITY FOR CANNED CORN.**

Subpart 1. **General.** The standard of quality for canned corn is as follows in subparts 2 and 3 and part 1555.5580.

Subp. 2. **Whole-kernel or evaporated corn.** When tested by the method prescribed in part 1555.5590, canned corn in which the corn ingredient is whole-kernel corn (part 1555.5500, item A) or evaporated corn (part 1555.5500, item E):

A. contains not more than one brown or black discolored kernel or piece of kernel for each two ounces of drained weight;

B. contains not more than one cubic centimeter of pieces of cob for each 14 ounces of drained weight;

C. contains not more than one square inch of husk for each 14 ounces of drained weight; and

D. contains not more than seven inches of silk for each one ounce of drained weight.

Subp. 3. **Fritter, ground, or cream-style corn.** When tested by the method prescribed in part 1555.5600, canned corn in which the corn ingredient is fritter corn (part 1555.5500, item B), ground corn (part 1555.5500, item C) or cream-style corn (part 1555.5500, item D):

A. contains not more than one brown or black discolored kernel or piece of kernel for each two ounces of net weight;

B. contains not more than one cubic centimeter of pieces of each 20 ounces of net weight;

C. contains not more than one square inch of husk for each 20 ounces of net weight;

D. contains not more than six inches of silk for each one ounce of net weight; and

E. has a consistency such that the average diameter of the approximately circular area over which the prescribed sample spreads does not exceed 12 inches, except that, in the case of cream-style corn the washed, drained material of which contains more than 20 percent of alcohol-insoluble solids, the average diameter of the approximately circular area over which the prescribed sample spreads does not exceed ten inches.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.5580 ALCOHOL-INSOLUBLE SOLIDS LIMIT.**

Subpart 1. **Whole-kernel corn.** The weight of the alcohol-insoluble solids of whole-kernel corn (part 1555.5500, item A) does not exceed 27 percent of the drained weight, when tested by the method prescribed in part 1555.5590.

Subp. 2. **Cream-style corn.** The weight of the alcohol-insoluble solids of the washed drained material of cream-style corn (part 1555.5500, item D) does not exceed 27 percent of the weight of such material, when tested by the method prescribed in part 1555.5600.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.5590 METHOD FOR TESTING WHOLE-KERNEL CORN AND EVAPORATED CORN.**

The method referred to in parts 1555.5570 and 1555.5580 for testing whole-kernel corn (part 1555.5500, item A) and evaporated corn (part 1555.5500, item E) is as follows:



A. Determine the gross weight of the container. Open and distribute the contents of the container over the meshes of an eight-mesh circular sieve which has previously been weighed. The diameter of the sieve is eight inches if the quantity of the contents of the container is less than three pounds and 12 inches if such quantity is three pounds or more. The bottom of the sieve is woven-wire cloth which complies with the specifications for such cloth set forth under "2380 Micron (No. 8)" in Table I of "Standard Specifications for Sieves," published March 1, 1940, in L.C. 584 of the United States Department of Commerce, National Bureau of Standards. Without shifting the material on the sieve, so incline the sieve as to facilitate drainage. Two minutes from the time drainage begins, weigh the sieve and the drained material. Record, in ounces, the weight so found, less the weight of the sieve, as the drained weight. Dry and weigh the empty container and subtract this weight from the gross weight to obtain the net weight. Calculate the percent of drained liquid in the net weight.

B. Pour the drained material from the sieve into a flat tray and spread it in a layer of fairly uniform thickness. Count, but do not remove, the brown or black discolored kernels or pieces of kernel and calculate the number per two ounces of drained material. Remove pieces of silk more than one-half inch long, husk, cob, and any pieces of material other than corn. Measure the aggregate length of such pieces of silk and calculate the length of silk per one ounce of drained weight. Spread the husk flat, measure its aggregate area, and calculate the area of husk per 14 ounces of drained weight. Place all pieces of cob under a measured amount of water in a cylinder which is so graduated that the volume can be measured to 0.1 cubic centimeter. Take the increase in volume as the aggregate volume of the cob and calculate the volume of cob per 14 ounces of drained weight.

C. If the corn is whole-kernel (part 1555.5500, item A), comminute a representative 100-gram sample of the drained corn from which the silk, husk, cob, and other material which is not corn (i.e., peppers) have been removed. An equal amount of water is used to facilitate this operation. Weigh to nearest 0.01 gram a portion of the comminuted material equivalent to approximately ten grams of the drained corn into a 600-cubic centimeter beaker. Add 300 cubic centimeters of 80 percent alcohol (by volume), stir, cover beaker, and bring to a boil. Simmer slowly for 30 minutes. Fit a Buchner funnel with a previously prepared filter paper of such size that its edges extend one-half inch or more up the vertical sides of the funnel. The previous preparation of the filter paper consists of drying it in a flat-bottomed dish for two hours at 100 degrees Celsius, covering the dish with a tight fitting cover, cooling it in a desiccator, and promptly weighing to the nearest 0.001 gram. After the filter paper is fitted to the funnel, apply suction and transfer the contents of the beaker to the funnel. Do not allow any of the material to run over the edge of the paper. Wash the material on the filter with 80 percent alcohol (by volume) until the washings are clear and colorless. Transfer the filter paper with the material retained thereon to the dish used in preparing the filter paper. Dry the material in a ventilated oven, without covering the dish, for two hours at 100 degrees Celsius. Place the cover on the dish, cool it in a desiccator, and promptly weigh to the nearest 0.001 gram. From this weight subtract the weight of the dish, cover, and paper as previously found. Calculate the remainder to percentage.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.5600 METHOD FOR TESTING FRITTER CORN AND CREAM-STYLE CORN.**

The method referred to in parts 1555.5570 and 1555.5580 for testing fritter corn (part 1555.5500, item C), ground corn (part 1555.5500, item D), and cream-style corn (part 1555.5500, item B), is as follows:

A. Allow the container to stand at least 24 hours at a temperature of 68 degrees Fahrenheit. Determine the gross weight, open, transfer the contents into a pan, and mix thoroughly in such a manner as not to incorporate air bubbles. (If the net contents of a single container is less than 18 ounces, determine the gross weight, open, and mix contents of the least number of containers necessary to obtain 18 ounces.) Fill

level full a hollow, truncated cone so placed on a polished horizontal plate as to prevent leakage. The cone has an inside bottom diameter of three inches, inside top diameter of two inches, and height of 4-27/32 inches. As soon as the cone is filled, lift it vertically. Determine the average of the longest and shortest diameters of the approximately circular area on the plate covered by the sample 30 seconds after lifting the cone. Dry and weigh each empty container and subtract the weight so found from the gross weight to obtain the net weight.

B. Transfer the material from the plate, cone, and pan onto an eight-mesh sieve as prescribed in part 1555.5590, item A. The diameter of the sieve is eight inches if the quantity of the contents of the container is less than three pounds, and 12 inches if such quantity is three pounds or more. Set the sieve in a pan. Add enough water to bring the level within three-eighths inch to one-fourth inch of the top of the sieve. Gently wash the material on the sieve by combined up-and-down and circular motion for 30 seconds. Repeat washing with a second portion of water. Remove sieve from pan, incline to facilitate drainage, and drain for two minutes.

C. From the material remaining on the eight-mesh sieve count, but do not remove, the brown or black discolored kernels or pieces of kernel and calculate the number per two ounces of net weight. Remove pieces of silk more than one-half inch long, husk, cob, and other material which is not corn (i.e., peppers). Measure aggregate length of such pieces of silk and calculate the length per ounce of net weight. Spread the husk flat and measure its aggregate area and calculate the area per 20 ounces of net weight. Place all pieces of cob under a measured amount of water in a cylinder which is so graduated that the volume may be measured to 0.1 cubic centimeter. Take the increase in volume as the aggregate volume of the cob and calculate the volume of cob per 20 ounces of net weight. If the corn is cream-style corn (part 1555.5500, item D), take a representative 100-gram sample of the material remaining on the eight-mesh sieve (if such material weighs less than 100 grams take all of it) and determine the alcohol-insoluble solids as prescribed in part 1555.5590, item C for whole-kernel corn.

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.5610 LABEL STATEMENT OF SUBSTANDARD QUALITY.**

If the quality of canned corn falls below the standard prescribed in parts 1555.5570 and 1555.5580, the label shall bear the general statement of substandard quality specified in part 1550.0920, in the manner and form therein specified; however, if the quality of the canned corn falls below standard with respect to only one of the factors of quality specified by part 1555.5570, subpart 2 or 3, there may be substituted for the second line of such general statement of substandard quality, "good food-not high grade," a new line as specified after the item of this part corresponding to the item of part 1555.5570, subparts 2 and 3 which the canned corn fails to meet:

- A. "excessive discolored kernels";
- B. "excessive cob";
- C. "excessive husk";
- D. "excessive silk"; or
- E. "excessive liquid."

**Statutory Authority:** *MS s 31.10; 31.101*

#### **1555.5620 STANDARD OF FILL OF CONTAINER FOR CANNED CORN WHERE CORN INGREDIENT IS FRITTER CORN, GROUND CORN, OR CREAM-STYLE CORN.**

The standard of fill of container for canned corn where the corn ingredient is in one of the forms known as fritter corn (part 1555.5500, item B), ground corn (part 1555.5500, item C), or cream-style corn (part 1555.5500, item D) is a fill of not less than 90 percent of the total capacity of the container, as determined by the general method for fill of containers prescribed in parts 1550.0900 and 1550.0910.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5630 LABEL STATEMENT OF SUBSTANDARD FILL.**

If canned fritter corn, canned ground corn, or canned cream-style corn falls below the standard of fill of container prescribed in part 1555.5620, the label shall bear the general statement of substandard fill specified in part 1550.0920, in the manner and form therein specified.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5640 CANNED FIELD CORN.**

Canned field corn conforms to the definition and standard of identity and is subject to the requirements for label statement of optional ingredients prescribed for canned corn by parts 1555.5490 to 1555.5560, except that the corn ingredient consists of succulent field corn or a mixture of succulent field corn and succulent sweet corn. The name of the food conforms to the name specified in parts 1555.5510 and 1555.5520, except that the words "corn," "sweet corn," and "sugar corn" are replaced by the words "field corn," and the term "golden field corn" is not used.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5650 CANNED FIELD CORN WHERE CORN INGREDIENT IS IN ONE OF THE FORMS KNOWN AS FRITTER FIELD CORN, GROUND FIELD CORN, OR CREAM-STYLE FIELD CORN.**

Each of the foods canned fritter field corn, canned ground field corn, and canned cream-style field corn conforms to the standard of fill of container and label statement of substandard fill prescribed for canned fritter corn, canned ground corn, and canned cream-style corn by parts 1555.5620 and 1555.5630.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5660 STANDARD FILL OF CONTAINER FOR CANNED MUSHROOMS.**

**Subpart 1. Description of standard.** The standard of fill of container for canned mushrooms is a fill such that the weight of drained mushrooms in a container the dimensions of which are specified in the table in subpart 2 is not less than the weight of drained mushrooms prescribed in such table for such container:

**Subp. 2. Table.**

Trade designation	Overall Dimensions sealed can		Weight of drained mushrooms Ounces (avoirdupois)
	Diameter Inches	Height Inches	
202 × 204	2-1/8	2-1/4	2
211 × 212	2-11/16	2-3/4	4
300 × 400	3	4	8
307 × 510	3-7/16	5-5/8	16
603 × 700	6-3/16	7	68

**Subp. 3. Standard for unspecified container size.** The drained weight of mushrooms in containers of a size not specified in subpart 1 is not less than 56 percent of the water capacity of the container, if such water capacity is less than 11.0 ounces avoirdupois; not less than 59 percent of the water capacity of the container, if such water capacity is 11.0 ounces or more but less than 25 ounces avoirdupois; and not less than 62 percent of the water capacity of the container, if such water capacity is 25 ounces avoirdupois or more.

**Statutory Authority:** *MS s 31.10; 31.101*

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### 1555.5670 DETERMINATION OF WATER CAPACITY OF CONTAINERS.

Water capacity of containers is determined by the general method provided in parts 1550.0900 to 1550.0910.

**Statutory Authority:** *MS s 31.10; 31.101*

### 1555.5680 DETERMINATION OF DRAINED WEIGHT.

Drained weight is determined by the following method. Tilt the opened container so as to distribute the contents evenly over the meshes of a circular sieve which has been previously weighed. The diameter of the sieve is eight inches if the quantity of contents of the container is less than three pounds, and 12 inches if such quantity is three pounds or more. The bottom of the sieve is woven-wire cloth which complies with the specifications for such cloth set forth under "2380 Micron (No. 8)" in Table 8 of "Standard Specifications for Sieves," published March 1, 1940, in L.C. 584 of the United States Department of Commerce, National Bureau of Standards.

Without shifting the material on the sieve, so incline the sieve as to facilitate drainage.

Two minutes after drainage begins, weigh the sieve and drained mushrooms. The weight so found, less the weight of the sieve, shall be considered to be the weight of drained mushrooms.

**Statutory Authority:** *MS s 31.10; 31.101*

### 1555.5690 LABEL STATEMENT OF SUBSTANDARD FILL.

If the canned mushrooms fall below the applicable standard of fill of container prescribed in part 1555.5660, the label shall bear the general statement of substandard fill specified in part 1550.0920, in the manner and form therein specified.

**Statutory Authority:** *MS s 31.10; 31.101*

### 1555.5700 CANNED VEGETABLES OTHER THAN THOSE SPECIFICALLY REGULATED.

The canned vegetables for which definitions and standards of identity are prescribed by parts 1555.5700 to 1555.5760 are those named in column I of the table set forth in part 1555.5710. The vegetable ingredient in each such canned vegetable is obtained by proper preparation from the succulent vegetable prescribed in column II of such table if two or more forms of such ingredient are designated in column III of such table, the vegetable in each such form is an optional ingredient.

**Statutory Authority:** *MS s 31.10; 31.101*

### 1555.5710 TABLE; IDENTITY OF OTHER CANNED VEGETABLES.

The table referred to in part 1555.5700 is as follows:

I	II	III
Name or synonym of Canned Vegetable	Source	Optional Forms of Vegetable Ingredient
Artichokes	Flower buds of the artichoke plant	Whole; half or halves or halved; whole hearts; halved hearts; quartered hearts
Asparagus	Edible portions of sprouts of the asparagus plant, as follows:	

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	3-3/4 inches or more of upper end	Stalks or spears
	3-3/4 inches or more of peeled upper end	Peeled stalks or peeled spears
	Not less than 2-3/4 inches but less than 3-3/4 inches of upper end	Tips
	Less than 2-3/4 inches of upper end	Points
	Sprouts cut in pieces	Cut stalks or cut spears
	Sprouts from which the tip has been removed, cut in pieces	Bottom cuts or cuts - tips removed
Bean sprouts	Sprouts of the Mung bean	
Shelled beans	Seed shelled from green or wax bean pods, with or without snaps (pieces of immature unshelled pods)	
Lima beans or butter beans	Seed shelled from the pods of the lima bean plant	
Beets	Root of the beet plant	Whole; slices or sliced; quarters or quartered; dice or diced; cut; shoestring or French style or julienne
Beet greens	Leaves, or leaves and immature root, of the beet plant	
Broccoli	Heads of the broccoli plant	
Brussels sprouts	Sprouts of the Brussels sprout plant	
Cabbage	Cut pieces of the heads of the cabbage plant	
Carrots	Root of the carrot plant	Whole; slices or sliced; quarters or quartered; dice or diced; cut; shoestring or French style or julienne
Cauliflower	Cut pieces of the head of the cauliflower plant	
Celery	Stalks of the celery plant	Cut; hearts
Collards	Leaves of the collard plant	

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Dandelion	Leaves of the dandelion plant	
Kale	Leaves of the kale plant	
Mushrooms	Cap and stem of the mushroom	Buttons; whole; slices or sliced; pieces and stems
Mustard greens	Leaves of the mustard plant	
Okra	Pods of the okra plant	Whole; cut
Onions	Bulb of the onion plant	Whole; cut
Parsnips	Root of the parsnip plant	Whole; quarters or quartered; slices or sliced; cut; shoestring or French style or julienne
Black-eye peas or black-eyed peas	Seed shelled from pods of the black-eye pea plant, with or without snaps (pieces of immature unshelled pods)	
Field peas	Seed shelled from pods of the field pea plant (other than the black-eye pea plant), with or without snaps (pieces of immature unshelled pods)	
Green sweet peppers	Green pods of the sweet pepper plant	Whole; halves or halved; pieces
Red sweet peppers	Red-ripe pods of the sweet pepper plant	Whole; halves or halved; pieces
Pimientos or pimentos	Red-ripe pods of the pimiento or pimento, pepper plant	Whole; halves or halved; pieces
Potatoes	Tuber of the potato plant	Whole; slices or sliced; dice or diced; pieces; shoestring or French style or julienne
Sweet potatoes	Tuber of the sweet potato plant	Whole; pieces; mashed

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Rutabagas	Root of the rutabaga plant	Whole; quarters or quartered; slices or sliced; dice or diced; cut
Salsify	Root of the salsify plant	
Spinach	Leaves of the spinach plant	
Swiss chard	Leaves of the Swiss chard plant	
Truffles	Fruit of the truffle	
Turnip greens	Leaves of the turnip plant	
Turnips	Root of the turnip plant	Whole; quarters or quartered; slices or sliced; dice or diced; cut

**Statutory Authority:** *MS s 31.10; 31.101*

### **1555.5720 ADDITION OF WATER, ASPARAGUS JUICE, CITRIC ACID, OR VINEGAR.**

To the vegetable ingredient water is added; except that pimientos may be canned with or without added water and sweet potatoes in mashed form are canned without added water and asparagus may be canned with added water, asparagus juice, or a mixture of both. For the purposes of parts 1555.5700 to 1555.5760, asparagus juice is the clear, unfermented liquid expressed from the washed and heated sprouts or parts of sprouts of the asparagus plant; mixtures of asparagus juice and water are considered to be water when such mixtures are used as a packing medium for canned asparagus. In the case of artichokes, citric acid or a vinegar is added in such quantity as to reduce the pH of the finished canned vegetable to 4.5 or below.

**Statutory Authority:** *MS s 31.10; 31.101*

### **1555.5730 OPTIONAL INGREDIENTS.**

The following optional ingredients, in the case of the vegetables specified, may be added:

A. Citric acid or a vinegar, in the cases of all vegetables (except artichokes, in which such ingredient is prescribed and except canned mushrooms, in which no such ingredient is permitted), in a quantity not more than sufficient to permit effective processing by heat without discoloration or other impairment of the article.

B. An edible vegetable oil, in the cases of artichokes and pimientos.

C. In the case of potatoes, purified calcium chloride, calcium sulfate, calcium citrate, monocalcium phosphate, or any mixture of two or more such calcium salts, in a quantity reasonably necessary to firm the potatoes, but in no case in a quantity such that the calcium contained in any such calcium salt or mixture is more than 0.051 percent of the weight of the finished food.

D. Snaps, in the cases of shelled bean, black-eyed peas, and field peas.

E. Salt may be added to any of the canned vegetables in this rule in a quantity sufficient to season the food.

F. In the cases of all vegetables (except canned mushrooms), one or more of the following optional seasoning ingredients may be added in a quantity sufficient to season the food: a vinegar, spice, refined sugar (sucrose), and refined corn sugar (dextrose).

G. In the case of canned mushrooms, ascorbic acid (vitamin C) may be added in a quantity not to exceed 37.5 milligrams for each ounce of drained weight of mushrooms.

H. In the cases of all vegetables, monosodium glutamate may be added in a quantity sufficient to season the food.

The food is sealed in a container and so processed by heat as to prevent spoilage.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.5740 NAME OF CANNED VEGETABLE.

The name of each canned vegetable for which a definition and standard of identity is prescribed by parts 1555.5700 to 1555.5760 is the name of any synonym thereof whereby such vegetable is designated in column I of the table in part 1555.5710.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.5745 FORM OF VEGETABLE.

If two or more forms of the vegetable are specified in column III of the table in part 1555.5710, the label shall bear the specified word or words or in case synonyms are so specified, one of such synonyms, showing the form of the vegetable ingredient present.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.5750 OPTIONAL INGREDIENTS LABELING.

Subpart 1. **Edible vegetable oil.** If the optional ingredient specified in part 1555.5730, item B is present, the label shall bear the statement "\_\_\_\_\_ oil added" or "with added \_\_\_\_\_ oil," the blank being filled in with the common or usual name of oil.

Subp. 2. **Calcium salts.** If the optional ingredient specified in part 1555.5730, item C is present, the label shall bear the statement "trace of \_\_\_\_\_ added" or "with added trace of \_\_\_\_\_," the blank being filled in with the words "calcium salt" or "calcium salts," as the case may be or with the name or names of the particular calcium salt or salts added.

Subp. 3. **Snaps.** If the optional ingredient specified in part 1555.5730, item D is present, the label shall bear the statement "with snaps."

Subp. 4. **Vinegar.** If a vinegar is present, the label shall bear the statement "seasoned with vinegar" or "seasoned with \_\_\_\_\_ vinegar," the blank being filled in with the common or usual name of the vinegar.

Subp. 5. **Spice.** If spice is present, the label shall bear the statement "spice added" or "with added spice."

Subp. 6. **Vinegar, spice, and vegetable oil.** If a vinegar, spice, and vegetable oil or any two of these are present, the label may bear, in lieu of the statements prescribed in part 1555.5745 and this part, showing the presence of such ingredients, a combination of such statements, as for example, "with added cider vinegar, spice, and olive oil."

Subp. 7. **Asparagus juice.** If asparagus juice is used as a packing medium in canned asparagus, the label shall bear the statement "packed in asparagus juice."

Subp. 8. **Monosodium glutamate.** If monosodium glutamate is used, the label shall bear the statement "monosodium glutamate added" or "with added monosodium glutamate."

**Statutory Authority:** *MS s 31.10; 31.101*



**1555.5760 PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.**

Wherever the name of the vegetable appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the words and statements specified in parts 1555.5745 and 1555.5750 shall immediately and conspicuously precede or follow such name, without intervening written, printed, or graphic matter, except that the varietal name of the vegetable may so intervene.

**Statutory Authority:** *MS s 31.10; 31.101*

**TOMATO PRODUCTS****1555.5770 TOMATO JUICE.**

“Tomato juice” is the unconcentrated liquid extracted from mature tomatoes of red or reddish varieties, with or without scalding, followed by draining. In the extraction of such liquid, heat may be applied by any method which does not add water thereto. Such liquid is strained free from skins, seeds, and other coarse or hard substances, but carries finely divided insoluble solids from the flesh of the tomato. Such liquid may be homogenized and may be seasoned with salt. When sealed in a container, it is so processed by heat, before or after sealing, as to prevent spoilage.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5780 YELLOW TOMATO JUICE.**

“Yellow tomato juice” is the unconcentrated liquid extracted from mature tomatoes of yellow varieties. It conforms, in all other respects, to the definition and standard of identity for tomato juice prescribed in part 1555.5770.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5790 CATSUP, KETCHUP, CATCHUP.**

“Catsup,” “ketchup,” “catchup” is the food prepared from one or any combination of two or all of the following optional ingredients:

- A. the liquid obtained from mature tomatoes of red or reddish varieties;
- B. the liquid obtained from the residue from preparing such tomatoes for canning, consisting of peelings and cores with or without such tomatoes or pieces thereof; and
- C. the liquid obtained from the residue from partial extraction of juice from such tomatoes.

Such liquid is obtained by so straining such tomatoes or residue, with or without heating, as to exclude skins, seeds, and other coarse or hard substances. It is concentrated and seasoned with salt, a vinegar or vinegars, spices or flavorings or both, and onions or garlic or both and is sweetened with sugar or a mixture of sugar and dextrose or a mixture of sugar (or sugar and dextrose) with corn syrup or dried corn syrup or both or with glucose syrup or dried glucose syrup or both, in such quantity that the weight of the solids of the corn syrup or dried corn syrup or both or glucose syrup or dried glucose syrup or both, is not more than one-third of the weight of the solids of such mixture. When sealed in a container it is so processed by heat, before or after sealing, as to prevent spoilage.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5800 CORN SYRUP; GLUCOSE SYRUP AND DRIED GLUCOSE SYRUP.**

For the purposes of parts 1555.5790 to 1555.5820, the term “corn syrup” means refined corn syrup (including dried corn syrup) the solids of which contain not less than 40 percent by weight of reducing sugars calculated as anhydrous dextrose; and the term “glucose syrup” means a clarified, concentrated aqueous solution of the products obtained by the incomplete hydrolysis of any edible starch. The solids of glucose syrup

contain not less than 40 percent by weight of reducing sugars calculated as anhydrous dextrose. "Dried glucose syrup" means the product obtained by drying "glucose syrup."

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.5820 LABEL STATEMENT OF OPTIONAL INGREDIENTS.

When optional ingredient specified in part 1555.5790, item B is present, in whole or in part, the label shall bear the statement "made from \_\_\_\_\_" (or "made in part from \_\_\_\_\_," as the case may be), "residual tomato material from canning." When optional ingredient specified in part 1555.5790, item C is present, in whole or in part, the label shall bear the statement "made from \_\_\_\_\_" (or "made in part from \_\_\_\_\_," as the case may be), "residual tomato material from partial extraction of juice." If both such ingredients are present, such statements may be combined in the statement "made from \_\_\_\_\_" (or "made in part from \_\_\_\_\_," as the case may be), "residual tomato material from canning and from partial extraction of juice." Wherever the name "catsup," "ketchup," or "catchup" appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the statement or statements specified in this part showing the optional ingredients present shall immediately and conspicuously precede or follow such name, without intervening written, printed, or graphic matter.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.5830 TOMATO PUREE, TOMATO PULP.

"Tomato puree," "tomato pulp" is the food prepared from one or any combination of two or all of the following optional ingredients:

- A. the liquid obtained from mature tomatoes of red or reddish varieties;
- B. the liquid obtained from the residue from preparing such tomatoes for canning, consisting of peelings and cores with or without such tomatoes or pieces thereof; and
- C. the liquid obtained from the residue from partial extraction of juice from such tomatoes.

Such liquid is obtained by so straining such tomatoes or residue, with or without heating, as to exclude skins, seeds, and other coarse or hard substances. It is concentrated and may be seasoned with salt. When sealed in a container it is so processed by heat, before or after sealing, as to prevent spoilage. It contains not less than 8.37 percent, but less than 25 percent, of salt-free tomato solids, as determined by the following method: determine total solids by the method prescribed on page 499 (Ed. note, 8th edition, 1955, page 570, section 30.2), under "Total Solids -- Tentative," and sodium chloride by the method prescribed on page 500 (Ed. note, 8th edition, 1955, page 571, section 30.8 Title changed to "Sodium Chloride Method I -- Official," under "Sodium Chloride -- Official"), of "Official and Tentative Methods of Analysis of the Association of Official Agricultural Chemists," 4th edition, 1935. Subtract the percent of sodium chloride found from the percent of total solids found; the difference shall be considered to be the percent of salt-free tomato solids.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.5840 LABEL STATEMENT OF OPTIONAL INGREDIENTS.

When optional ingredient specified in part 1555.5830, item B is present, in whole or in part, the label shall bear the statement, "made from \_\_\_\_\_" (or "made in part from \_\_\_\_\_," as the case may be) "residual tomato material from canning." When optional ingredient specified in part 1555.5830, item C is present, in whole or in part, the label shall bear the statement "made from \_\_\_\_\_" (or "made in part from \_\_\_\_\_," as the case may be) "residual tomato material from partial extraction of juice." If both such ingredients are present, such statements may be combined in the statement "made from \_\_\_\_\_" (or "made in part from \_\_\_\_\_," as the case may be), "residual tomato material from canning

and from partial extraction of juice." Wherever the name "tomato puree" or "tomato pulp" appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the statement or statements specified in this part, showing the optional ingredients present shall immediately and conspicuously precede or follow such name, without intervening written, printed, or graphic matter.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.5850 TOMATO PASTE.

Subpart 1. **Sources.** "Tomato paste" is the food prepared from one or any combination of two or all of the following optional ingredients:

- A. the liquid obtained from mature tomatoes of red or reddish varieties;
- B. the liquid obtained from the residue from preparing such tomatoes for canning, consisting of peelings and cores with or without such tomatoes or pieces thereof; and
- C. the liquid obtained from the residue from partial extraction of juice from such tomatoes.

Such liquid is obtained by so straining such tomatoes or residue, with or without heating, as to exclude skins, seeds, and other coarse or hard substances.

Subp. 2. **Seasoning.** It is concentrated and may be seasoned with one or more of the optional ingredients:

- A. Salt
- B. Spice
- C. Flavoring.

Subp. 3. **Baking soda.** It may contain, in such quantity as neutralizes a part of the tomato acids, the optional ingredient: baking soda.

Subp. 4. **Processing and solids.** When sealed in a container it is so processed by heat, before or after sealing, as to prevent spoilage. It contains not less than 25 percent of salt-free tomato solids, as determined by the following method: determine total solids by the method prescribed on page 499 (Ed. note, 8th edition, 1955, page 570, section 30.2), under "Total Solids -- Tentative" and sodium chloride by the method prescribed on page 500 (Ed. note, 8th edition, 1955, page 571, section 30.8), under "Sodium Chloride -- Official," of "Official and Tentative Methods of Analysis of the Association of Official Agricultural Chemists," 4th edition, 1935. Subtract the percent of sodium chloride found from the percent of total solids found; the difference shall be considered to be the percent of salt-free tomato solids.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.5860 LABEL STATEMENT OF OPTIONAL INGREDIENTS.

When optional ingredient specified in part 1555.5850, subpart 1, item B is present, in whole or in part, the label shall bear the statement "made from \_\_\_\_\_" (or "made in part from \_\_\_\_\_," as the case may be), "residual tomato material from canning." When optional ingredient specified in part 1555.5850, subpart 1, item C is present in whole or in part, the label shall bear the statement "made from \_\_\_\_\_," (or "made in part from \_\_\_\_\_," as the case may be), "residual tomato material from partial extraction of juice." If both such ingredients are present such statements may be combined in the statement "made from \_\_\_\_\_" (or "made in part from \_\_\_\_\_," as the case may be), "residual tomato material from canning and from partial extraction of juice." When optional ingredient specified in part 1555.5850, subpart 2, items B and C, is present the label shall bear the statement or statements, "spice added" or "with added spice," "flavoring added" or "with added flavoring," as the case may be. When optional ingredient specified in part 1555.5850, subpart 3 is present the label shall bear the statement "baking soda added." If two or all of the optional ingredients specified in part 1555.5850, subpart 2, items B and C, and subpart 3 are present such statements

may be combined, as for example, "spice, flavoring, and baking soda added." In lieu of the word "spice" or "flavoring" in such statement or statements, the common or usual name of such spice or flavoring may be used.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.5870 PLACEMENT OF LABEL STATEMENT OF OPTIONAL INGREDIENTS.

Wherever the name "tomato paste" appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the statement or statements specified in part 1555.5860, showing the optional ingredients present shall immediately and conspicuously precede or follow such name, without intervening written, printed, or graphic matter.

**Statutory Authority:** *MS s 31.10; 31.101*

#### 1555.5880 CANNED TOMATOES.

Subpart 1. **Ingredients.** Canned tomatoes are mature tomatoes of red or reddish varieties which are peeled and cored and to which may be added one or more of the following optional ingredients:

- A. the liquid draining from such tomatoes during or after peeling and coring;
- B. the liquid strained from the residue from preparing such tomatoes for canning, consisting of peelings and cores with or without such tomatoes or pieces thereof;
- C. the liquid strained from mature tomatoes of such varieties;
- D. purified calcium chloride, calcium sulfate, calcium citrate, monocalcium phosphate, or any two or more of these calcium salts, in a quantity reasonably necessary to firm the tomatoes, but in no case such that the amount of the calcium contained in such salts is more than 0.026 percent of the weight of the finished canned tomatoes; and
- E. it may be seasoned with one or more of the optional ingredients:
  - (1) salt;
  - (2) spices; and
  - (3) flavoring.

It is sealed in a container and so processed by heat as to prevent spoilage.

Subp. 2. **Label statements.** When optional ingredient specified in subpart 1, item B is present, the label shall bear the statement "with added strained residual tomato material from preparation for canning." When one or more of the optional ingredients specified in subpart 1, item D is present the label shall bear the statement "trace of \_\_\_\_\_ added" or "with added trace of \_\_\_\_\_," the blank being filled in with the words "calcium salts" as the case may be or with the name or names of the particular calcium salt or salts added. When optional ingredient specified in subpart 1, item E, subitem 2 or 3 is present, the label shall bear the statement or statements "spice added" or "with added spice," "flavoring added" or "with added flavoring," as the case may be. If two or more of optional ingredients specified in subpart 1, items B and E, subitems 2 and 3 are present, such statements may be combined, as for example, "with added strained residual tomato material from preparation for canning, spice, and flavoring." In lieu of the word "spice" or "flavoring" in such statement or statements, the common or usual name of such spice or flavoring may be used. Wherever the name "tomatoes" appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the statement or statements herein specified showing the optional ingredients present shall immediately and conspicuously precede or follow such name, without intervening written, printed, or graphic matter.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5890 STANDARD OF QUALITY FOR CANNED TOMATOES.**

The standard of quality for canned tomatoes is as follows:

A. The drained weight, as determined by the method prescribed in part 1555.5900, item A, is not less than 50 percent of the weight of water required to fill the container, as determined by the general method for water capacity of containers prescribed in part 1550.0900.

B. The strength and redness of color as determined by the method prescribed in part 1555.5900, item B, is not less than that of the blended color of any combination of the color discs described in such method, in which one-third the area of disc one and not more than one-third the area of disc two, is exposed.

C. Peel, per pound of canned tomatoes in the container, covers an area of not more than one square inch.

D. Blemishes, per pound of canned tomatoes in the container, cover an area of not more than one-fourth square inch.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.5900 TESTING METHOD.**

Canned tomatoes shall be tested by the following method to determine whether or not they meet the requirements of part 1555.5890, items A and B:

A. Remove lid from container, but in the case of a container with lid attached by double seam, do not remove or alter the height of the double seam. Tilt the opened container so as to distribute the contents over the meshes of a circular sieve which has previously been weighed. The diameter of the sieve used is eight inches if the quantity of the contents of the container is less than three pounds or 12 inches if such quantity is three pounds or more. The meshes of such sieve are made by so weaving wire of 0.054 inch diameter as to form square openings 0.446 inch by 0.446 inch. Without shifting the tomatoes, so incline the sieve as to facilitate drainage of the liquid. Two minutes from the time drainage begins, weigh the sieve and drained tomatoes. The weight so found, less the weight of the sieve, shall be considered to be the drained weight.

B. Remove from the sieve the drained tomatoes obtained in item A. Cut out and segregate successively those portions of least redness until 50 percent of the drained weight, as determined under item A, has been so segregated. Comminute the segregated portions to a uniform mixture without removing or breaking the seeds. Fill the mixture into a black container to a depth of at least one inch. Free the mixture from air bubbles and skim off or press below the surface all visible seeds. Compare the color of the mixture, in full diffused daylight or its equivalent, with the blended color of combinations of the following concentric Munsell color discs of equal diameter or the color equivalents of such discs: red -- Munsell 5 R 2.6/13 (glossy finish); yellow -- Munsell 2.5 YR 5/12 (glossy finish); black -- Munsell N 1/(glossy finish); grey -- Munsell N 4 (matte finish).

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.6000 LABEL STATEMENT OF SUBSTANDARD QUALITY.**

If the quality of canned tomatoes falls below the standard prescribed in part 1555.5890, the label shall bear the general statement of substandard quality specified in part 1550.0920 in the manner and form therein specified; but in lieu of such general statement of substandard quality, the label may bear the alternative statement "below standard in quality \_\_\_\_\_," the blank to be filled in with the words specified after the corresponding number of each item of part 1555.5890 which such canned tomatoes fail to meet, as follows:

- A. "excessively broken up";
- B. "poor color";
- C. "excessive peel"; or
- D. "excessive blemishes."

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.6010 EXCESSIVE PEELS AND BLEMISHES.**

If such canned tomatoes fail to meet both items C and D of part 1555.5890, the words "excessive peel and blemishes" may be used instead of the words specified after the corresponding item letters in part 1555.6000. Such alternative statement shall immediately and conspicuously precede or follow, without intervening written, printed, or graphic matter, the name "tomatoes" and any statements required or authorized to appear with such name by part 1555.5880, subpart 2.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.6020 STANDARD OF FILL OF CONTAINER FOR CANNED TOMATOES.**

The standard of fill of container for canned tomatoes is a fill of not less than 90 percent of the total capacity of the container, as determined by the general method for fill of containers prescribed in parts 1550.0900 to 1550.0910.

**Statutory Authority:** *MS s 31.10; 31.101*

**1555.6030 LABEL STATEMENT OF SUBSTANDARD FILL.**

If canned tomatoes fall below the standard of fill of container prescribed in part 1555.6020, the label shall bear the general statement of substandard fill specified in part 1550.0920, in the manner and form therein specified.

**Statutory Authority:** *MS s 31.10; 31.101*

**LIQUID HONEY****1555.6040 DEFINITIONS.**

Subpart 1. **Applicability.** The following definitions shall apply in the interpretation and enforcement of parts 1555.6040 to 1555.6320.

Subp. 2. **Crystallized honey.** "Crystallized honey" is honey that is solidly granulated or crystallized irrespective of whether "candied," "fondant," "creamed," or "spread" types of crystallized honey.

Subp. 3. **Honey.** "Honey" is the nectar and saccharine exudations of plants gathered, modified, and stored in the comb of honey bees; is levorotatory, contains not more than 25 percent of water, not more than 25/100 percent of ash, and not more than eight percent sucrose.

Subp. 4. **Honey house.** "Honey house" is a building or portion of a building in which honey is separated from the comb, processed, and packed.

Subp. 5. **Liquid honey.** "Liquid honey" is honey that has been separated from the comb by centrifugal force, gravity, straining, or by other means under sanitary conditions, and is free from visible crystals.

Subp. 6. **Partially crystallized honey.** "Partially crystallized honey" is honey that is a mixture of liquid honey and crystallized honey.

Subp. 7. **Person.** "Person" is any individual, partnership, corporation, or association.

**Statutory Authority:** *MS s 31.73*

**1555.6050 HONEY GRADES.**

No person shall sell or keep for sale liquid honey unless it has been graded according to the following grades promulgated by the commissioner of agriculture and labeled with the grade and the name and address of the producer, packer, or distributor which information shall be printed in letters not smaller than eight-point capitals except the grade which shall be printed in letters not smaller than 14-point boldface capitals.

**Statutory Authority:** *MS s 31.73*

**1555.6060 MINNESOTA GRADE AA PREMIUM HONEY.**

“Minnesota Grade AA premium honey” means honey that contains not more than 18.6 percent moisture. The color standard shall be water white or extra white as indicated by a Pfund reading of 17 millimeters or less. Such honey shall possess a good flavor for the predominant floral source or when blended, a good flavor for the blend of floral sources, shall be free from defects and of such quality with respect to clarity as to score not fewer than 90 points when scored in accordance with the scoring system outlined herein and shall further comply with the individual rules relating to flavor, absence from defects, and clarity.

**Statutory Authority:** *MS s 31.73*

**1555.6070 MINNESOTA GRADE A FANCY HONEY.**

“Minnesota Grade A fancy honey” means honey that contains not more than 18.6 percent of moisture. The color standard shall be white, as indicated by a Pfund reading of 18 to 30 millimeters. Such honey shall possess a good flavor for the predominant floral source or when blended, a good flavor for the blend of floral sources, shall be free from defects, shall be clear, and shall score not less than 90 points when scored in accordance with the scoring system outlined herein and shall further comply with the individual rules relating to flavor, absence from defects, and clarity.

**Statutory Authority:** *MS s 31.73*

**1555.6080 COLOR STANDARDS.**

Any honey of a quality that meets the standards set forth for Minnesota Grade A fancy honey or Minnesota Grade B choice honey, but fails to meet the color standards for those grades may be labeled as such providing such label also states the predominant floral source.

**Statutory Authority:** *MS s 31.73*

**1555.6090 MINNESOTA GRADE B CHOICE HONEY.**

“Minnesota Grade B choice honey” shall include honey that contains not more than 18.6 percent moisture. The color standard shall be extra light amber, as indicated by a Pfund reading of 30 to 50 millimeters. Such honey shall possess a reasonably good flavor for the predominant floral source or when blended, a reasonably good flavor for the blend of floral sources, shall be reasonably free from defects, shall be reasonably clear, and shall score not less than 80 points when scored in accordance with the scoring system outlined herein, and shall further comply with the individual rules relating to flavor, absence from defects, and clarity.

**Statutory Authority:** *MS s 31.73*

**1555.6100 MINNESOTA GRADE C STANDARD HONEY.**

“Minnesota Grade C standard honey” means honey which may contain up to 20 percent moisture and be of a color standard, light amber, amber, or dark amber. This grade shall include such honeys grading 50 millimeters or more on the Pfund grader. This honey shall possess a fairly good flavor for the predominant floral source or when blended, a fairly good flavor for the blend of floral sources, shall be fairly free from defects, and shall be of such quality with respect to clarity as to score not less than 70 points when scored in accordance with the scoring system outlined herein and shall further comply with the individual rules relating to flavor, absence from defects, and clarity.

**Statutory Authority:** *MS s 31.73*

**1555.6110 MINNESOTA GRADE D SUBSTANDARD HONEY.**

“Minnesota Grade D substandard honey” means honey fit for human consumption that fails to meet the standards set forth for Minnesota Grade C standard honey.

**Statutory Authority:** *MS s 31.73*

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### 1555.6120 MINNESOTA GRADE UTILITY HONEY.

"Minnesota grade utility honey" means honey fit for human consumption in possession of and offered for sale by the original producer which has never been graded in accordance with any of the above grades. This grade shall apply only to honey in possession of and offered for sale by the original producer and any subsequent sale by another person shall be in accordance with the above specified grades.

**Statutory Authority:** *MS s 31.73*

### 1555.6130 FACTOR RATING FOR FLAVOR, ABSENCE OF DEFECTS, AND CLARITY.

The essential variations within each factor are so described that the value may be ascertained for each factor and expressed numerically. The numerical range for the rating of each factor is inclusive (for example) "27 to 30 points" means 27, 28, 29, or 30 points. The relative importance of each factor is expressed numerically on the scale of 100. The maximum number that may be given each factor is:

Factor	Points
Flavor	50
Absence of Defects	40
Clarity	<u>10</u>
Total Score	100

**Statutory Authority:** *MS s 31.73*

### 1555.6140 GRADE FACTORS.

Minnesota honey grades shall be ascertained after consideration of five factors affecting the grades. They are color, moisture, flavor, absence of defects, and clarity. The latter three are scored according to part 1555.6130.

**Statutory Authority:** *MS s 31.73*

### 1555.6150 COLOR AND MOISTURE.

The color of honey is one criterion of quality for the purpose of Minnesota standards for grading liquid honey. The color shall be determined by means of a satisfactory colorimeter for example, the United States Department of Agriculture permanent colored glass classifier or the Pfund grader. The color of crystallized honey or partially crystallized honey will be determined after the honey has been liquefied by heating to approximately 54.40 degrees Celsius (130 degrees Fahrenheit) and cooled to approximately 20 degrees Celsius (68 degrees Fahrenheit) before ascertaining the color. If the United States Department of Agriculture permanent colored glass color standards are used in determining the color of honey, such equipment shall be used in accordance with United States Department of Agriculture requirements.

**Statutory Authority:** *MS s 31.73*

### 1555.6160 TABLE OF COLOR AND MOISTURE STANDARDS TO GRADE MINNESOTA HONEY.

Grade	U.S.D.A., Color Standards	Pfund Scale (millimeter)	Moisture Content Not To Exceed
"Minnesota Grade AA Premium"	Water White and Extra White	17 or less	18.6%



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“Minnesota Grade A Fancy”	White	17 to 30	18.6%
“Minnesota Grade B Choice”	Extra Light Amber	30 to 50	18.6%
“Minnesota Grade C Standard”	Light Amber, Amber, Dark Amber	50 and up	20.%

**Statutory Authority:** *MS s 31.73*

### 1555.6170 FLAVOR.

The factor of flavor refers to the prominence of the honey flavor and aroma and to its conformity to the flavor and aroma of the predominant floral source or blend of floral sources.

**Statutory Authority:** *MS s 31.73*

### 1555.6180 GOOD FLAVOR.

Honey that possesses a good flavor for the predominant floral source may be given a score of 45 to 50 points. “Good flavor for the predominant floral source” means that the product has a good, normal flavor and aroma for the predominant floral source or when blended, a good flavor for the blend of floral sources, and that the honey is free from caramelized flavor or objectionable flavor caused by fermentation, smoke, chemicals, or other causes with the exception of the predominant floral source.

**Statutory Authority:** *MS s 31.73*

### 1555.6190 REASONABLY GOOD FLAVOR.

If the honey possesses a reasonably good flavor for the predominant floral source, a score of 40 to 44 points may be given. Honey that falls into this classification shall not be graded above Minnesota Grade B choice honey regardless of the total score for the product. This is a limiting rule. “Reasonably good flavor for the predominant floral source” means that the product has a reasonably good, normal flavor and aroma for the predominant floral source or when blended, a reasonably good flavor for the blend of floral sources and that the honey is practically free from caramelized flavor and is free from objectional flavor caused by fermentation, smoke, chemicals, or other causes with the exception of the predominant floral source.

**Statutory Authority:** *MS s 31.73*

### 1555.6200 FAIRLY GOOD FLAVOR.

Honey that possesses a fairly good flavor for the predominant floral source may be given a score of 35 to 39 points. Honey that falls into this classification shall not be graded above Minnesota Grade C standard honey regardless of the total score of the product. This is a limiting rule. “Fairly good flavor for the predominant floral source” means that the product has a fairly good, normal flavor and aroma for the predominant floral source or when blended, a fairly good flavor for the blend of floral sources and that the honey may possess a slightly caramelized flavor, is free from objectionable flavor caused by fermentation, smoke, chemicals, or other causes with the exception of the predominant floral source.

**Statutory Authority:** *MS s 31.73*

### 1555.6210 OFF FLAVOR.

Honey that fails to meet the requirements of Minnesota Grade C standard honey or is off flavor for any reason may be given a score of zero to 34 points and shall not be

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graded above Minnesota Grade D substandard honey regardless of the total score for the product. This is a limiting rule.

**Statutory Authority:** *MS s 31.73*

### 1555.6220 ABSENCE OF DEFECTS.

The factor of absence of defects refers to the degree of cleanliness and to the degree of freedom from particles of comb, propolis, and other defects which may be in suspension or deposited as sediment in the container.

**Statutory Authority:** *MS s 31.73*

### 1555.6230 HONEY FREE FROM DEFECTS.

Honey that is free from defects may be given a score of 37 to 40 points. Honey that falls into this classification may be graded Minnesota Grade AA premium honey or Minnesota Grade A fancy honey. "Free from defects" means that the honey contains no defects that affect the appearance or edibility of the product and shall be at least as free from defects as honey that has been strained through a standard No. 80 sieve, at a temperature of not more than 54.4 degrees Celsius (130 degrees Fahrenheit).

**Statutory Authority:** *MS s 31.73*

### 1555.6240 HONEY REASONABLY FREE FROM DEFECTS.

If the honey is reasonably free from defects, a score of 34 to 36 points may be given. Honey that falls into this classification shall not be graded above Minnesota Grade B choice honey regardless of the total score for the product. This is a limiting rule. "Reasonably free from defects" means that the honey may contain defects which do not materially affect the appearance or edibility of the product and shall be at least as free from defects as honey that has been strained through a standard No. 50 sieve, at a temperature of not more than 54.4 degrees Celsius (130 degrees Fahrenheit).

**Statutory Authority:** *MS s 31.73*

### 1555.6250 HONEY FAIRLY FREE FROM DEFECTS.

Honey that is fairly free from defects may be given a score of 31 to 33 points. Honey that falls into this classification shall not be graded above Minnesota Grade C standard honey regardless of the total score for the product. This is a limiting rule. "Fairly free from defects" means that the honey may contain defects which may be noticeable but shall be at least as free from defects as honey that has been strained through a standard No. 18 sieve, at a temperature of not more than 54.4 degrees Celsius (130 degrees Fahrenheit).

**Statutory Authority:** *MS s 31.73*

### 1555.6260 HONEY THAT FAILS TO MEET THE REQUIREMENTS OF MINNESOTA GRADE C STANDARD HONEY.

Honey that fails to meet the requirements of Minnesota Grade C standard honey may be given a score of zero to 29 points and shall not be graded above Minnesota Grade D substandard honey regardless of the total score for the product. This is a limiting rule.

**Statutory Authority:** *MS s 31.73*

### 1555.6270 CLARITY.

The factor of clarity has reference to the degree of freedom from air bubbles, pollen grains, or fine particles of any material which might be suspended in the product.

**Statutory Authority:** *MS s 31.73*

**1555.6280 CLEAR HONEY.**

Honey that is clear may be given a score of eight to ten points. "Clear" means that the honey may contain air bubbles which do not materially affect the appearance of the product and may contain a trace of pollen grains or other finely divided particles of suspended material which do not affect the appearance of the product.

**Statutory Authority:** *MS s 31.73*

**1555.6290 REASONABLY CLEAR HONEY.**

If the honey is reasonably clear, a score of six to seven points may be given. Honey that falls into this classification shall not be graded above Minnesota Grade B choice honey regardless of the total score for the product. This is a limiting rule. "Reasonably clear" means that the honey may contain air bubbles, pollen grains, or other finely divided particles of suspended material which do not materially affect the appearance of the product.

**Statutory Authority:** *MS s 31.73*

**1555.6300 FAIRLY CLEAR HONEY.**

Honey that is fairly clear may be given a score of four to five points. Honey that falls into this classification shall not be graded above Minnesota Grade C standard honey regardless of the total score for the product. This is a limiting rule. "Fairly clear" means that the appearance of the honey may be materially but not seriously affected by the presence of air bubbles, pollen grains, or other finely divided particles of suspended material.

**Statutory Authority:** *MS s 31.73*

**1555.6310 HONEY THAT FAILS TO MEET THE REQUIREMENTS OF MINNESOTA GRADE C STANDARD HONEY.**

Honey that fails to meet the requirements of Minnesota Grade C standard honey may be given a score of zero to three points and shall not be graded above Minnesota Grade D substandard honey regardless of the total score for the product. This is a limiting rule.

**Statutory Authority:** *MS s 31.73*

**1555.6320 REQUIREMENT FOR GRADES WHEN HONEY IS ADVERTISED AT A PRICE.**

Any advertisement of honey at a given price shall plainly and conspicuously indicate the grade of honey.

**Statutory Authority:** *MS s 31.73*

**APPLES****1555.6330 DEFINITIONS.**

Subpart 1. **Mature.** "Mature" means that the apples have reached the stage of growth which will ensure the proper completion of the ripening process. Before a mature apple becomes overripe it will show varying degrees of firmness, depending upon the stage of the ripening process. The following terms are used for describing these different stages of firmness of apples.

A. "Hard" means apples with a tenacious flesh and starchy flavor. Apples at this stage are suitable for storage and long-distance shipment.

B. "Firm" means apples with a tenacious flesh but which are becoming crisp with a slight starchy flavor, except the Delicious variety. Apples at this stage are also suitable for storage and long-distance shipment.

C. "Firm ripe" means apples with crisp flesh except that the flesh of the apples of the Gano, Ben Davis, and Rome Beauty varieties may be slightly mealy.

Apples at this stage may be shipped long distances but should be moved into consumption within a short period of time.

D. "Ripe" means apples with mealy flesh and soon to become soft for the variety. Apples at this stage should be moved immediately into consumption.

Subp. 2. **Overripe.** "Overripe" means apples which are dead ripe, with flesh very mealy or soft and past commercial utility.

Subp. 3. **Carefully hand-picked.** "Carefully hand-picked" means that the apples do not show evidence of rough handling or of having been on the ground.

Subp. 4. **Clean.** "Clean" means that the apples are free from excessive dirt, dust, spray residue, and other foreign material.

Subp. 5. **Well formed.** "Well formed" means that the apple has the normal shape characteristic of the variety, except that the shape may be slightly irregular, provided, it does not detract from the general appearance of the apple.

Subp. 6. **Injury.** "Injury" means any defect which more than slightly affects the appearance, or the edible or shipping quality of the apples.

A. Russeting in the stem cavity or calyx basin which cannot be seen when the apple is placed stem end or calyx end down on a flat surface, shall not be considered in determining whether or not an apple is injured by russeting, except that rough or bark-like russeting in the stem cavity or calyx basin shall be considered as injury when the appearance of the apple is materially affected. The following types and amounts of russeting outside of the stem cavity or calyx basin, shall be considered as injury:

(1) smooth, net-like russeting, when an aggregate area of more than five percent of the surface is covered and the color of the russeting shows no very pronounced contrast with the background color of the apple or lesser amounts of more conspicuous net-like russeting when the appearance is affected to a greater extent than the above amount permitted;

(2) smooth, solid russeting which covers an aggregate area of more than one-half inch in diameter and the pattern and color of the russeting shows no very pronounced contrast with the background color of the apple or lesser amounts of more conspicuous solid russeting when the appearance is affected to a greater extent than the above amount permitted (see part 1555.6365);

(3) slightly rough russeting which covers an aggregate area of more than one-fourth inch in diameter (see part 1555.6365);

(4) rough russeting, unless it is well within the stem cavity or calyx basin and is not readily apparent.

B. Any one of the following defects or any combination thereof the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as injury:

(1) sunburn or spray burn, when the discolored area does not blend into the normal color of the fruit;

(2) dark brown or black limb rubs which affect a total area of more than one-eighth inch in diameter, except that light brown limb rubs of a russet character shall be considered under the definition of injury by russeting in item A (see part 1555.6365);

(3) hail marks, drought spots, or other similar depressions or scars where there is appreciable discoloration other than russeting or when the indentations are not superficial or when an individual indentation exceeds one-eighth inch in diameter or the total affected area exceeds one-fourth inch in diameter (see part 1555.6365);

(4) stem or calyx cracks which are not well healed or well healed stem or calyx cracks which exceed a length of one-eighth inch;

(5) diseases: cedar rust infection which affects a total area of more than one-eighth inch in diameter (see part 1555.6365); sooty blotch or fly speck which is thinly scattered over more than five percent of the surface or dark, heavily concentrated spots which affect an area of more than one-fourth inch in diameter (see part

1555.6365); red skin spots which are thinly scattered over more than one-tenth of the surface or dark, heavily concentrated spots which affect an area of more than one-fourth inch in diameter (see part 1555.6365);

(6) insects: Any healed sting or healed stings which affect a total area of more than one-eighth inch in diameter including any encircling discolored rings (see part 1555.6365); and worm holes.

Subp. 7. **Fairly well formed.** "Fairly well formed" means that the apple may be slightly abnormal in shape but not to an extent which detracts materially from its appearance.

**Statutory Authority:** *MS s 30.55*

#### 1555.6340 DAMAGE.

"Damage" means any defect which materially affects the appearance or the edible or shipping quality of the apples.

A. Russetting in the stem cavity or calyx basin which cannot be seen when the apple is placed stem end or calyx end down on a flat surface shall not be considered in determining whether or not an apple is damaged by russetting, except that excessively rough or bark-like russetting in the stem cavity or calyx basin shall be considered as damage when the appearance of the apple is materially affected. The following types and amounts of russetting outside of the stem cavity or calyx basin shall be considered as damage:

(1) russetting which is excessively rough on Roxbury Russet and other similar varieties;

(2) smooth net-like russetting, when an aggregate area of more than 15 percent of the surface is covered and the color of the russetting shows no very pronounced contrast with the background color of the apple or lesser amounts of more conspicuous net-like russetting when the appearance is affected to a greater extent than the above amount permitted;

(3) smooth solid russetting, when an aggregate area of more than five percent of the surface is covered and the pattern and color of the russetting shows no very pronounced contrast with the background color of the apple or lesser amounts of more conspicuous solid russetting when the appearance is affected to a greater extent than the above amount permitted;

(4) slightly rough russetting which covers an aggregate area of more than one-half inch in diameter (see part 1555.6365);

(5) rough russetting which exceeds one-fourth inch in diameter, unless it is well within the stem cavity or calyx basin and is not readily apparent (see part 1555.6365).

B. Any one of the following defects or any combination thereof the seriousness of which exceeds the maximum allowed for any one defect shall be considered as damage:

(1) sunburn or spray burn which has caused blistering or cracking of the skin or when the discolored area does not blend into the normal color of the fruit unless the injury can be classed as russetting;

(2) limb rubs which affect a total area of more than one-half inch in diameter, except that light brown limb rubs of a russet character shall be considered under the definition of damage by russetting in part 1555.6330, subpart 6, item A (see part 1555.6365);

(3) hail marks, drought spots, or other similar depressions or scars which are not superficial or when such injury affects a total area of more than one-half inch in diameter (see part 1555.6365);

(4) stem or calyx cracks which are not well-healed or well-healed stem or calyx cracks which exceed an aggregate length of one-fourth inch;

(5) diseases: scab spots which affect a total area of more than one-fourth inch in diameter (see part 1555.6365); cedar rust infection which affects a total area of more than one-fourth inch in diameter (see part 1555.6365); sooty blotch or fly speck which is thinly scattered over more than one-tenth of the surface or dark, heavily concentrated spots which affect an area of more than one-half inch in diameter (see part 1555.6365); and red skin spots which are thinly scattered over more than one-tenth of the surface or dark, heavily concentrated spots which affect an area of more than one-half inch in diameter (see part 1555.6365);

(6) insects: any healed sting or healed stings which affect a total area of more than 3/16 inch in diameter including any encircling discolored rings (see part 1555.6365); and worm holes.

**Statutory Authority:** *MS s 30.55*

#### **1555.6350 SERIOUSLY DEFORMED.**

“Seriously deformed” means that the apple is so badly misshapen that its appearance is seriously affected.

**Statutory Authority:** *MS s 30.55*

#### **1555.6360 SERIOUS DAMAGE.**

“Serious damage” means any defect which seriously affects the appearance or the edible or shipping quality of the apples.

A. The following types and amounts of russetting shall be considered as serious damage: smooth solid russetting, when more than one-half of the surface in the aggregate is covered, including any russetting in the stem cavity or calyx basin or slightly rough or excessively rough or bark-like russetting which detracts from the appearance of the fruit to a greater extent than the amount of smooth solid russetting permitted; provided, that any amount of russetting shall be permitted on Roxbury Russet and other similar varieties.

B. Any one of the following defects or any combination thereof the seriousness of which exceeds the maximum allowed for any one defect shall be considered as serious damage:

(1) sunburn or spray burn which seriously detracts from the appearance of the fruit;

(2) limb rubs which affect more than one-tenth of the surface in the aggregate;

(3) hail marks, drought spots or scars if they materially deform or disfigure the fruit, or if such defects affect more than one-tenth of the surface in the aggregate; provided, that no hail marks which are unhealed shall be permitted and not more than an aggregate area of one-half inch shall be allowed for well-healed hail marks where the skin has been broken (see part 1555.6365);

(4) stem or calyx cracks which are not well-healed or well-healed stem or calyx cracks which exceed an aggregate length of one-half inch;

(5) visible water core which affects an area of more than one-half inch in diameter;

(6) diseases: scab spots which affect a total area of more than three-fourths inch in diameter (see part 1555.6365); cedar rust infection which affects a total area of more than three-fourths inch in diameter (see part 1555.6365); sooty blotch or fly speck which affects more than one-third of the surface; red skin spots which affect more than one-third of the surface; and bitter pit and Jonathan spot which is thinly scattered over more than one-tenth of the surface and does not materially deform or disfigure the fruit;

(7) insects: healed stings which affect a total area of more than one-fourth inch in diameter including any encircling discolored rings (see part 1555.6365); and worm holes.

**Statutory Authority:** *MS s 30.55*

#### **1555.6365 AREA.**

In designated area measurements in parts 1555.6330 to 1555.6360, the area refers to that of a circle of the specified diameter.

**Statutory Authority:** *MS s 30.55*

#### **1555.6370 APPLICABILITY.**

The provisions of parts 1555.6330 to 1555.6530 shall not be applicable to any apples bearing a grade as determined by official inspection under regulations and standards of either the federal or any state regulatory department having requirements for the various grades of apple labeling equal to or in excess of the standards and quality required by the state of Minnesota.

**Statutory Authority:** *MS s 30.55*

#### **1555.6380 APPLES NOT MEETING GRADE REQUIREMENTS.**

All apples which fail to meet the requirements of Minnesota extra fancy, Minnesota fancy, Minnesota No. 1, Minnesota No. cookers, Minnesota No. early, Minnesota No. 2, and Minnesota hair grade shall be conspicuously marked with a label bearing the word "utility." Letters of size not less than three-fourths inch height shall be conspicuously printed or stamped on the container.

**Statutory Authority:** *MS s 30.55*

#### **1555.6390 GRADES.**

Subpart 1. **Minnesota extra fancy.** Minnesota extra fancy consists of apples of one variety which are: mature, but not overripe; carefully hand-picked; clean; well formed; and free from decay, internal browning, internal breakdown, scald, scab, bitter pit, Jonathan spot, freezing injury, broken skins and bruises (except those that are slight and incident to proper handling and packing), and visible water core. The apples also shall be free from injury caused by russetting, sunburn or spray burn, limb rubs, hail, drought spots, scars, stem or calyx cracks, other diseases, insects, or mechanical or other means. Each apple of this grade shall have the amount of color specified hereinafter for the variety. (See parts 1555.6400 to 1555.6490.)

Subp. 2. **Minnesota fancy.** Minnesota fancy consists of apples of one variety which are mature, but not overripe; carefully hand-picked; clean; fairly well-formed; and free from decay, internal browning, internal breakdown, bitter pit, Jonathan spot, scald, freezing injury, broken skins and bruises (except those incident to proper handling and packing) and visible water core. The apples also shall be free from damage caused by russetting, sunburn or spray burn, limb rubs, hail, drought spots, scars, stem or calyx cracks, other diseases, insects, or mechanical or other means. Each apple of this grade shall have the amount of color specified hereinafter for the variety. (See parts 1555.6400 to 1555.6490.)

Subp. 3. **Minnesota No. 1.** Minnesota No. 1 consists of apples meeting the same requirements as Minnesota fancy except for color and russetting. In this grade less color is required for all varieties except yellow and green varieties, for which the requirements for both grades are the same. Apples of this grade shall be free from excessive damage caused by russetting which means that they shall meet the russetting requirements for Minnesota fancy as defined under the definitions of "damage by russetting," part 1555.6340; provided, that the aggregate area of an apple which may be covered by smooth net-like russetting shall not exceed 25 percent; and further provided, that the aggregate area of an apple which may be covered by smooth solid russetting shall not exceed ten percent. (See parts 1555.6400 to 1555.6490.)

Subp. 4. **Minnesota No. 1 cookers.** Minnesota No. 1 cookers consists of apples of one variety which meet the requirements of Minnesota No. 1 grade except as to color. This grade is provided for apples which are mature but which may not have sufficient color to meet the specifications of Minnesota No. 1. (See parts 1555.6450 to 1555.6490.)

Subp. 5. **Minnesota No. 1 early.** Minnesota No. 1 early consists of apples of one variety which meet the requirements of Minnesota No. 1 grade except as to color, maturity, and size. Apples of this grade have no color requirements, need not be mature, and shall be not less than two inches in diameter. This grade is provided for varieties such as Duchess, Gravenstein, Red June, Twenty Ounce, Wealthy, Williams, Yellow Transparent and Lodi, or other varieties which are normally marketing during the summer months. (See parts 1555.6450 to 1555.6490.)

Subp. 6. **Minnesota No. 2.** Minnesota No. 2 consists of apples of one variety which are mature, but not overripe; carefully hand-packed; not seriously deformed; free from decay, internal browning, internal breakdown, scald, and freezing injury. The apples also shall be free from serious damage caused by dirt or other foreign matter, broken skins, bruises, russetting, sunburn, spray burn, limb rubs, hail, drought spots, scars, stem or calyx cracks, visible water core, other diseases, insects, or mechanical or other means. (See parts 1555.6450 to 1555.6490.)

Subp. 7. **Combination grades.** Combinations of the above grades can be used as follows: combination Minnesota extra fancy and Minnesota fancy; combination Minnesota fancy and Minnesota No. 1; and combination Minnesota No. 1 and Minnesota No. 2. Combinations other than these are not permitted in connection with the Minnesota apple grades. When combination Minnesota extra fancy and Minnesota fancy is packed, at least 25 percent of the apples in any lot shall meet the requirements of the higher grade in the combination. When combination Minnesota fancy and Minnesota No. 1 or combination Minnesota No. 1 and Minnesota No. 2 is packed, at least 50 percent of the apples in any lot shall meet the requirements of the higher grade in the combination. (See parts 1555.6400 to 1555.6490.)

Subp. 8. **Minnesota hail grade.** Minnesota hail grade consists of apples which meet the requirements of Minnesota No. 1 grade except that hail marks where the skin has not been broken and well-healed hail marks where the skin has been broken shall be permitted, provided the apples are fairly well formed. (See parts 1555.6400 to 1555.6490.)

**Statutory Authority:** *MS s 30.55*

#### **1555.6400 COLOR REQUIREMENTS.**

In addition to the requirements specified for the above grades, apples of these grades shall have the percentage of color specified for the variety in part 1555.6430.

**Statutory Authority:** *MS s 30.55*

#### **1555.6410 SOLID RED VARIETIES.**

For the solid red varieties the percentage stated refers to the area of the surface which must be covered with a good shade of solid red characteristic of the variety; provided, that an apple having color of a lighter shade of solid red or striped red than that considered as a good shade of red characteristic of the variety may be admitted to a grade, provided it has sufficient additional area covered so that the apple has as good an appearance as one with the minimum percentage of good red characteristic of the variety required for the grade.

**Statutory Authority:** *MS s 30.55*

#### **1555.6420 STRIPED RED VARIETIES.**

For the striped red varieties the percentage stated refers to the area of the surface in which the stripes of a good shade of red characteristic of the variety shall predominate over stripes of lighter red, green, or yellow. However, an apple having



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color of a lighter shade than that considered as a good shade of red characteristic of the variety may be admitted to a grade; provided, that it has sufficient additional area covered so that the apple has as good an appearance as one with the minimum percentage of stripes of a good red characteristic of the variety required for the grade. Faded brown stripes shall not be considered as color except in the case of the Gray Baldwin variety.

**Statutory Authority:** *MS s 30.55*

## 1555.6430 COLOR REQUIREMENTS FOR SPECIFIED MINNESOTA GRADES OF APPLES, BY VARIETIES.

Variety	Minnesota	Minnesota	Minnesota
	Extra Fancy	Fancy	Number 1
	Percent	Percent	Percent
<b>Solid Red:</b>			
Beacon	75	50	25
Black Ben	75	50	25
Gano	75	50	25
Lakeland	75	50	25
Minjon	75	50	25
Redwell	75	50	25
Winesap	75	50	25
Other similar varieties <sup>1</sup>	75	50	25
Red Sport varieties <sup>2</sup>	75	50	25
<b>Striped or partially red:</b>			
Cortland	66	33	25
Fireside	66	33	25
Haralson	66	33	25
Jonathan	66	33	25
McIntosh	66	33	25
Melba	66	33	25
Prairie Spy	66	33	25
Other similar varieties <sup>3</sup>	66	33	25
Baldwin	50	25	15
Ben Davis	50	25	15
Delicious	50	25	15
Early McIntosh	50	25	15
Mammoth Black Twig	50	25	15
Northern Spy	50	25	15
Rome Beauty	50	25	15
Stayman	50	25	15
Turley	50	25	15
Wagener	50	25	15
Wealthy	50	25	15
Willow Twig	50	25	15
York Imperial	50	25	15
Other similar varieties <sup>4</sup>	50	25	15
Hubbardston	50	15	10
Stark	50	15	10
Other similar varieties <sup>5</sup>	50	15	10
Red June	50	15	5
Williams	50	15	5
Other similar varieties	50	15	5
Duchess	25	10	5

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Gravenstein	25	10	5
Other similar varieties <sup>6</sup>	25	10	5
Yellow varieties	7	7	7
Golden Delicious	8	8	8

<sup>1</sup> Arkansas Black, Detroit Red, Esopus Spitzenburg, King David, Lowry.

<sup>2</sup> When Red Sport varieties are specified as such they shall meet the color requirements specified for Red Sport varieties.

<sup>3</sup> Kendall, Macoun, Snow (Fameuse), Jewell Winter, Victory.

<sup>4</sup> Bonum, Limbertwig, Milton, Nero, Paragon.

<sup>5</sup> Tinge of color.

<sup>6</sup> Red Astrachan, Smokehouse, Summer Rambo, Oriole.

<sup>7</sup> Characteristic ground color.

<sup>8</sup> 75 percent characteristic color.

NOTE: "Characteristic color", when the white around the lenticels predominates over the green color, creating a mottling effect on the surface of the apple, it shall be considered as the minimum characteristic color.

**Statutory Authority:** *MS s 30.55*

### 1555.6440 UTILITY DESIGNATION.

Utility consists of apples which are not graded in conformity with any of the foregoing grades. The term "utility" is not a grade within the meaning of these standards but is provided as a designation to show that no definite grade has been applied to the lot.

**Statutory Authority:** *MS s 30.55*

### 1555.6450 TOLERANCES.

In order to allow for variations incident to proper grading and handling, not more than a total of ten percent of the apples in any lot may fail to meet the requirements of the grade; provided, that not more than one-half of this amount, or five percent, shall be allowed for apples which are seriously damaged by insects and including not more than one percent for apples affected by decay or internal breakdown or both.

**Statutory Authority:** *MS s 30.55*

### 1555.6460 APPLYING TOLERANCES.

When applying the foregoing tolerances to combination Minnesota extra fancy and Minnesota fancy grade, no part of any tolerance shall be allowed to reduce, for the lot as a whole, the 25 percent of apples of the higher grade required in the combination, but individual containers shall have not less than 15 percent of the higher grade.

When applying the foregoing tolerances to combination Minnesota fancy and Minnesota No. 1 grade and to combination Minnesota No. 1 and Minnesota No. 2 grade, no part of any tolerance shall be allowed to reduce, for the lot as a whole, the 50 percent of apples of the higher grade required in the combination, but individual containers shall have not less than 40 percent of the higher grade.

**Statutory Authority:** *MS s 30.55*

### 1555.6470 CONTENTS OF INDIVIDUAL PACKAGES IN A LOT.

The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations, provided the averages for the entire lot are within the tolerances specified for the grade:

A. for packages which contain more than ten pounds and a tolerance of ten percent or more is provided (as in the case of size, where a tolerance of 15 percent is

provided) individual packages in any lot shall have not more than 1-1/2 times the tolerance specified;

B. for packages which contain more than ten pounds and a tolerance of less than ten percent is provided, individual packages in any lot shall have not more than double the tolerance specified, except that at least one apple which is seriously damaged by insects or affected by decay or internal breakdown may be permitted in any package;

C. for packages which contain ten pounds or less, individual packages in any lot are not restricted as to the percentage of defects; provided, that not more than one apple which is seriously damaged by insects or affected by decay or internal breakdown may be permitted in any package.

**Statutory Authority:** *MS s 30.55*

#### **1555.6480 BASIS OF CALCULATING PERCENTAGES.**

When the numerical count is marked on the container, percentages shall be calculated on the basis of count. When the minimum diameter or minimum and maximum diameters are marked on the container, percentages shall be calculated on the basis of weight. When the apples are in bulk, percentages shall be calculated on the basis of weight.

**Statutory Authority:** *MS s 30.55*

#### **1555.6490 CONDITION AFTER STORAGE OR TRANSIT.**

Decay, scald, or any other deterioration which may have developed on apples after they have been in storage or transit shall be considered as affecting condition and not the grade.

**Statutory Authority:** *MS s 30.55*

#### **1555.6500 SIZE REQUIREMENTS.**

The size of the apples packed in a closed container shall be indicated on the container. The minimum size shall be plainly stamped, stenciled, or otherwise marked on the container in terms of whole inches, whole and half inches, whole and quarter inches, or whole and eighth inches, as 2-1/2 inches minimum, 2-1/4 inches minimum, or 2-5/8 inches minimum, in accordance with the facts.

**Statutory Authority:** *MS s 30.55*

#### **1555.6510 MEASUREMENT FOR MINIMUM SIZE.**

The measurement for minimum size shall be the largest diameter of the apple taken at right angles to a line from the stem end to the blossom end. The measurement for maximum size shall be the smallest dimension of the apple determined by passing the apple through a round opening.

**Statutory Authority:** *MS s 30.55*

#### **1555.6520 VARIATIONS.**

In order to allow for variations incident to proper sizing, not more than five percent of the apples in any lot may not meet the size requirements; provided, that when the maximum and minimum sizes are both stated, an additional ten percent tolerance shall be allowed for apples which are larger than the maximum size stated.

**Statutory Authority:** *MS s 30.55*

#### **1555.6530 SUGGESTED ABBREVIATIONS FOR MARKING CONTAINERS.**

In order to conserve space, abbreviations may be used for marking Minnesota grade names on containers. The following abbreviations are suggested where it is not desired to use the full grade name: Minn. Ex. Fcy. for Minnesota Extra Fancy; Minn. Fcy. for Minnesota Fancy; Minn. No. 1 for Minnesota No. 1; Minn. No. 2 for

Minnesota No. 2, Combination grades may be designated by abbreviations of the grades preceded by the abbreviation "Comb." as "Comb. Minn. Fcy -- Minn. No. 1."

**Statutory Authority:** *MS s 30.55*

## POTATOES

### 1555.6540 DEFINITIONS.

Subpart 1. **Artificially colored.** The term "artificially colored" when used to refer to potatoes shall mean and include the addition of any substance or material to the surface of potatoes or to transparent containers in which potatoes are displayed for sale which changes the appearance of said potatoes.

Subp. 2. **Clean.** "Clean" means that the individual potato is practically free from dirt or staining and practically no loose dirt or other foreign matter is present in the container.

Subp. 3. **Closed container or package.** "Closed container or package" means any container so secured that a prospective purchaser is unable to make a selection of individual potatoes from its contents.

Subp. 4. **Damage.** "Damage," unless otherwise specifically defined in this part, means any defect which materially affects the edible or shipping quality, or the internal or external appearance of the individual potato, or any external defect which cannot be removed without a loss of more than five percent of the total weight of the potato including peel covering the defective area. Any one of the following defects, or any combination of defects the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as damage:

A. dirt or other foreign matter when the individual potato is more than slightly dirty or slightly stained, or when more than a moderate amount of loose dirt or other foreign matter is present in the container;

B. sunburn when the discoloration extends into the flesh to such an extent that it cannot be removed without a loss of more than five percent of the total weight of the potato including peel covering the affected area;

C. greening caused by exposure to natural or artificial light when the appearance of the individual potato is materially affected by yellowish or greenish surface discoloration, or when discoloration extends into the flesh of the potato and cannot be removed without a loss of more than five percent of the total weight of the potato including peel covering the defective area;

D. second growth which materially affects the appearance of the individual potato;

E. growth cracks which materially affect the appearance of the individual potato;

F. air cracks which are deep, or shallow air cracks which materially affect the appearance of the individual potato;

G. hollow heart which materially affects the internal appearance of the potato cut longitudinally;

H. internal discoloration, any part of which affects the vascular ring or occurs between the ring and the skin of the potato when the discoloration cannot be removed without a loss of more than five percent of the total weight of the potato including peel covering the defective area, or discoloration occurring entirely within the area bounded by the vascular ring when there is more than the equivalent of three scattered light brown spots one-eighth inch in diameter in a round or intermediate type potato 2-1/2 inches in diameter or in a long type potato six ounces in weight, or correspondingly lesser or greater numbers of spots on smaller or larger potatoes;

I. external discoloration when the appearance of the potato is materially affected;

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J. shriveling when the potato is more than moderately shriveled, spongy, or flabby;

K. sprouting when more than ten percent of the potatoes in the lot have external sprouts over three-fourths inch in length, or when the removal of an ingrown sprout causes a loss of more than five percent of the total weight of the potato including peel covering the defective area;

L. scab when surface scab shows no pronounced contrast with the background color of the potato and the aggregate area exceeds five percent of the surface, or when surface scab shows a pronounced contrast with the background color and the aggregate area exceeds three percent of the surface; when pitted scab affects the appearance of the potato to a greater extent than the amount of surface scab permitted or causes a loss of more than five percent of the total weight of the potato including peel covering the defective area; or when russet scab materially affects the appearance of the potato;

M. rhizoctonia when the appearance of the potato is materially affected, or when the surface is materially caked with black scurf;

N. dried stems when pliable and over one-eighth inch in diameter and over 2-1/2 inches long, or when stiff and over one-eighth inch in diameter and over one inch long;

O. insects, larvae, or worms when present inside the potato, or when any hole caused by them or by grass root or similar injury in a round or intermediate type potato 2-1/2 inches in diameter, or in a long type potato six ounces in weight, is more than three-fourths inch long, or when the aggregate length of all holes in such potatoes is more than 1-1/4 inches, or correspondingly shorter or longer holes in smaller or larger potatoes, or when other types of injury materially affect the appearance of the potato or cannot be removed without a loss of more than five percent of the total weight of the potato including peel covering the defective area;

P. mechanical or other means when cuts, shatter bruises or other bruises, punctures, or other injuries materially affect the appearance of the potato or cannot be removed without a loss of more than five percent of the total weight of the potato including peel covering the defective area.

Subp. 5. **Fairly clean.** "Fairly clean" means that the individual potato is reasonably free from dirt or staining and not more than a slight amount of loose dirt or other foreign matter is present in the container.

Subp. 6. **Fairly well matured.** "Fairly well matured" means that not more than ten percent, by weight, of the individual potatoes in the lot have more than one-fourth of the skin missing or feathered.

Subp. 7. **Fairly well shaped.** "Fairly well shaped" means that the individual potato is not materially pointed, dumbbell-shaped, or otherwise ill-formed.

Subp. 8. **Label.** The term "label" as used in parts 1555.6550 to 1555.6710 includes any legend or descriptive matter or design appearing upon potatoes or their container and also includes circulars, pamphlets, and the like, which are packed with and go with the potatoes to the purchaser, and such letters, circulars, and pamphlets to which reference is made either on the label attached to the container or on the container itself. The term "tag label" means a label which is attached to but is not a permanent part of the container.

Subp. 9. **Lot.** "Lot" means any number of containers which contain a product of the same kind located in the same conveyance, warehouse, packing house, or on the same dock or platform and which are available for inspection at the same time; provided, that:

A. products which are different from each other as to grade, variety, size, condition, identification marks, or other factors may be deemed to be separate lots;

B. if the applicant requests more than one inspection certificate covering different portions of the same lot, the quantity of the lot covered by each certificate shall be deemed to be a separate lot; and

C. if said product is packed in more than one size or type of container, each such size or type may be deemed to be a separate lot.

Subp. 10. **Serious damage.** "Serious damage," unless otherwise specifically defined in this part, means any defect which seriously affects the edible or shipping quality, or the internal or external appearance of the individual potato, or any external defect which cannot be removed without a loss of more than ten percent of the total weight of the potato including peel covering the defective area. Any one of the following defects, or any combination of defects the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as serious damage:

A. dirt or other foreign matter when the individual potato is badly caked with dirt or badly stained, or when an excessive amount of loose dirt or other foreign matter is present in the container;

B. sunburn when the discoloration extends into the flesh to such an extent that it cannot be removed without a loss of more than ten percent of the total weight of the potato including peel covering the affected area;

C. greening caused by exposure to natural or artificial light when the appearance of the individual potato is seriously affected by yellowish or greenish surface discoloration or when such discoloration extends into the flesh of the potato and cannot be removed without a loss of more than five percent of the total weight of the potato including peel covering the defective area;

D. second growth which seriously affects the appearance of the individual potato;

E. growth cracks which seriously affect the appearance of the individual potato;

F. air cracks which seriously affect the appearance of the individual potato;

G. hollow heart which seriously affects the internal appearance of the potato cut longitudinally;

H. internal discoloration, any part of which affects the vascular ring or occurs between the ring and the skin of the potato when the discoloration cannot be removed without a loss of more than ten percent of the total weight of the potato including peel covering the defective area, or discoloration occurring entirely within the area bounded by the vascular ring when there is more than the equivalent of six scattered light brown spots one-eighth inch in diameter in a round or intermediate type potato 2-1/2 inches in diameter or in a long type potato six ounces in weight, or correspondingly lesser or greater numbers of spots on smaller or larger potatoes;

I. external discoloration when the appearance of the potato is seriously affected;

J. shriveling when the potato is excessively shriveled, spongy, or flabby;

K. scab when surface scab shows no pronounced contrast with the background color of the potato and the aggregate area exceeds 50 percent of the surface, or when surface scab shows a pronounced contrast with the background color and the aggregate area exceeds 25 percent of the surface; when pitted scab affects the appearance of the potato to a greater extent than the amount of surface scab permitted or causes a loss of more than ten percent of the total weight of the potato including peel covering the defective area; or when russet scab seriously affects the appearance of the potato;

L. rhizoctonia when the appearance of the potato is seriously affected, or when the surface is badly caked with black scurf;

M. insects, larvae, or worms when present inside the potato, or when any hole caused by them or by grass roots or similar injury in a round or intermediate type potato 2-1/2 inches in diameter or in a long type potato six ounces in weight, is more than 1-1/2 inches long, or when the aggregate length of all holes in such potatoes is more than two inches, or correspondingly shorter or longer holes in smaller or larger potatoes, or when other types of injury seriously affect the appearance of the potato or cannot be removed without a loss of more than ten percent of the total weight of the potato including peel covering the defective area; and

N. mechanical or other means when a fairly smooth cut such as is made by a knife to remove injury occurs on both ends of the potato; provided, that such a cut shall be permitted on one end of the potato if the length of the remaining portion of the clipped potato is more than 1-1/2 times the greatest diameter of the cut and that the remaining portion of a clipped long-type potato weighs at least six ounces; or when other cuts, shatter bruises or other bruises, punctures, or other injuries seriously affect the appearance of the potato or cannot be removed without a loss of more than ten percent of the total weight of the potato including peel covering the defective area.

Subp. 11. **Seriously misshapen.** "Seriously misshapen" means that the individual potato is seriously pointed, dumbbell-shaped, or otherwise badly deformed.

Subp. 12. **Soft rot or wet breakdown.** "Soft rot or wet breakdown" means any soft, mushy, or leaky condition of the tissue such as slimy soft rot, leak, or wet breakdown following freezing injury or sunscald.

Subp. 13. **Well shaped.** "Well shaped" means that the potato has the normal shape for the variety and is not pointed, dumbbell-shaped, or otherwise ill-formed.

**Statutory Authority:** *MS s 30.102*

### 1555.6550 MINNESOTA FANCY POTATOES.

Subpart 1. **General.** "Minnesota fancy" consists of potatoes of one variety or similar varietal characteristics which are fairly well matured and fairly well shaped; which are clean; which are not frozen; and which are free from freezing injury, blackheart, late blight, southern bacterial wilt, ring rot, soft rot, or wet breakdown, and free from damage caused by sunburn, greening, second growth, growth cracks, air cracks, hollow heart, internal discoloration, external discoloration, shriveling, sprouting, scab, dry rot, rhizoctonia, dried stems, insects, larvae, worms, other disease, or mechanical or other means.

Subp. 2. **Size.** Unless otherwise specified, the size shall be as follows: the diameter of each potato shall be not less than two inches; for round or intermediate shaped varieties such as Irish Cobbler, Katahdin, Sebago, Pontiac, Kennebec, Green Mountain, or other similar varieties, not less than 60 percent of the potatoes in any lot shall be 2-1/4 inches or larger but not larger than 3-3/4 inches in diameter, including therein not less than 30 percent which are 2-3/4 inches or larger. For long varieties such as Russet Burbank, Early Gem, White Rose, or other similar varieties, not less than 60 percent of the potatoes in any lot shall be six ounces or more in weight, including therein not less than 30 percent which are ten ounces, but not more than 14 ounces in weight.

Subp. 3. **Tolerances for defects.** In order to allow for variations, other than size, incident to proper grading and handling, not more than ten percent, by weight, of the potatoes may be fairly clean, not more than a total of five percent may fail to meet the other requirements of this grade relating to external and internal defects; provided, that not more than two-fifths of this amount, or two percent, shall be allowed for potatoes which are frozen or affected by southern bacterial wilt, ring rot, late blight, soft rot, or wet breakdown, including therein not more than one-half of one percent for potatoes which are frozen or affected by soft rot or wet breakdown. (See part 1555.6640.)

**Statutory Authority:** *MS s 30.102*

### 1555.6560 MINNESOTA NO. 1 POTATOES.

Subpart 1. **General.** "Minnesota No. 1" consists of potatoes of one variety or similar varietal characteristics which are fairly well shaped; which are not frozen; and which are free from freezing injury, blackheart, late blight, southern bacterial wilt, ring rot, soft rot, or wet breakdown, and free from damage caused by dirt or other foreign matter, sunburn, greening, second growth, growth cracks, air cracks, hollow heart, internal discoloration, external discoloration, shriveling, sprouting, scab, dry rot, rhizoctonia, dried stems, insects, larvae, worms, other disease, or mechanical or other means. (See part 1555.6630.)

Subp. 2. **Size.** Unless otherwise specified, the diameter of each potato shall be not less than 1-7/8 inches. (See parts 1555.6600 to 1555.6620.)

Subp. 3. **Tolerances for defects.** In order to allow for variations, other than size, incident to proper grading and handling, not more than a total of 11 percent, by weight, of the potatoes in any lot may fail to meet the requirements of this grade; provided, that included in this amount not more than the following percentages shall be allowed for the defects listed: six percent for potatoes having external defects; and five percent for potatoes which are damaged by hollow heart, internal discoloration, or other internal defects; and provided further, that included in the above tolerances for external and internal defects not more than three percent shall be allowed for potatoes which are frozen or affected by southern bacterial wilt, ring rot, blight, soft rot, or wet breakdown, including therein not more than one percent for potatoes which are frozen or affected by soft rot or wet breakdown. (See part 1555.6640.)

**Statutory Authority:** *MS s 30.102*

### 1555.6570 MINNESOTA NO. 2 POTATOES.

Subpart 1. **General.** "Minnesota No. 2" consists of potatoes of one variety or similar varietal characteristics which are not seriously misshapen or frozen; and which are free from freezing injury, blackheart, late blight, southern bacterial wilt, ring rot, soft rot, or wet breakdown, and free from serious damage caused by dirt or other foreign matter, sunburn, greening, second growth, growth cracks, air cracks, hollow heart, internal discoloration, external discoloration, shriveling, scab, dry rot, rhizoctonia, insects, larvae, worms, other disease, or mechanical or other means. (See part 1555.6630.)

Subp. 2. **Size.** Unless otherwise specified, the diameter of each potato shall be not less than 1-1/2 inches. (See parts 1555.6600 to 1555.6620.)

Subp. 3. **Tolerances for defects.** In order to allow for variations, other than size, incident to proper grading and handling, not more than a total of 11 percent, by weight, of the potatoes in any lot may fail to meet the requirements of this grade; provided, that included in this amount not more than the following percentages shall be allowed for the defects listed: six percent for potatoes having external defects; and five percent for potatoes which are seriously damaged by hollow heart, internal discoloration, or other internal defects; and provided further, that included in the above tolerances for external and internal defects not more than three percent shall be allowed for potatoes which are frozen or affected by southern bacterial wilt, ring rot, late blight, soft rot, or wet breakdown, including therein not more than one percent for potatoes which are frozen or affected by soft rot or wet breakdown. (See part 1555.6640.)

**Statutory Authority:** *MS s 30.102*

### 1555.6580 MINNESOTA UTILITY POTATOES.

Subpart 1. **General.** "Minnesota utility" consists of potatoes of one variety or similar varietal characteristics which are not frozen; and which are free from freezing injury, blackheart, late blight, southern bacterial wilt, ring rot, soft rot, or wet breakdown, and free from serious damage caused by sunburn, greening, shriveling, dry rot, insects, larvae, worms, other disease, or other means. (See part 1555.6630.)

Subp. 2. **Size.** Unless otherwise specified, the diameter of each potato shall be not less than 1-1/2 inches. (See parts 1555.6600 to 1555.6620.)

Subp. 3. **Tolerances for defects.** In order to allow for variations, other than size, incident to proper grading and handling, not more than a total of 11 percent, by weight, of the potatoes in any lot may fail to meet the requirements of this grade; provided, that included in this amount not more than the following percentages shall be allowed for the defects listed: six percent for potatoes having external defects listed in this part; and five percent for potatoes which are seriously damaged by internal defects listed in this part; and provided further, that included in the above tolerances for external and internal defects not more than three percent shall be allowed for potatoes which are



frozen or affected by southern bacterial wilt, ring rot, late blight, soft rot, or wet breakdown, including therein not more than one percent for potatoes which are frozen or affected by soft rot or wet breakdown. (See part 1555.6640.)

**Statutory Authority:** *MS s 30.102*

#### **1555.6590 UNCLASSIFIED POTATOES.**

“Unclassified” consists of potatoes which have not been classified in accordance with any of the foregoing grades. The term “unclassified” is not a grade within the meaning of these standards, but is provided as a designation to show that no grade has been applied to the lot.

**Statutory Authority:** *MS s 30.102*

#### **1555.6600 SIZE.**

The count, minimum size, or range of size may be specified in connection with the grade in terms of number of potatoes per container, or diameter or weight of the individual potato, or in accordance with one of the following size classifications:

A. Size A: for round or intermediate shaped varieties such as Irish Cobbler, Katahdin, Sebago, Pontiac, Kennebec, Green Mountain, or other similar varieties, the diameter of each potato shall be not less than 1-7/8 inches, and not less than 60 percent of the potatoes in the lot shall be 2-1/4 inches or larger; for long varieties such as Russet Burbank, Early Gem, White Rose, or other similar varieties, the diameter of each potato shall be not less than 1-7/8 inches, and not less than 40 percent of the potatoes in the lot shall be six ounces or more in weight;

B. Size B: for all varieties the potatoes shall be from 1-1/2 to 2-1/4 inches in diameter, inclusive; and

C. Size C: for all varieties the potatoes shall be from one inch to 1-1/2 inches in diameter, inclusive.

**Statutory Authority:** *MS s 30.102*

#### **1555.6610 DIAMETER.**

“Diameter” means the greatest dimension at right angles to the longitudinal axis.

**Statutory Authority:** *MS s 30.102*

#### **1555.6620 TOLERANCES FOR SIZE.**

In order to allow for variations incident to proper sizing, the following tolerances shall be allowed. Not more than three percent of the potatoes in any lot may fail to meet the specified minimum size except that a tolerance of five percent shall be allowed for potatoes packed to meet a minimum size of 2-1/4 inches or more in diameter or six ounces or more in weight. In addition, not more than ten percent may fail to meet any specified maximum size. When a percentage of the potatoes is specified to be of a certain size and larger, individual packages containing 15 pounds or less shall have not less than one-half of the percentage specified, and individual packages containing more than 15 pounds shall have not less than three-fourths of the percentage specified. When a number of potatoes per package is specified, the number of potatoes in individual packages shall not vary more than five percent from the number specified.

**Statutory Authority:** *MS s 30.102*

#### **1555.6630 SKINNING CLASSIFICATION.**

The following optional skinning classifications are provided as a basis for classifying lots of potatoes as to the degree of skinning. “Practically no skinning” means that not more than five percent of the potatoes in the lot have more than one-tenth of the skin missing or “feathered.” “Slightly skinned” means that not more than ten percent of the potatoes in the lot have more than one-fourth of the skin missing or “feathered.” “Moderately skinned” means that not more than ten percent of the potatoes in the lot

have more than one-half of the skin missing or "feathered." "Badly skinned" means that more than ten percent of the potatoes in the lot have more than one-half of the skin missing or "feathered."

**Statutory Authority:** *MS s 30.102*

**1555.6640 APPLICATION OF TOLERANCES.**

The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations; provided, that the averages for the entire lot are within the tolerances specified for the grade. For packages which contain more than 15 pounds, when a tolerance of ten percent or more is provided, individual packages in the lot shall have not more than 1-1/2 times the tolerance specified, and when a tolerance of less than ten percent is provided, individual packages in the lot shall have not more than double the tolerance specified, except that for potatoes which are frozen or affected by soft rot or wet breakdown, en route or at destination, not more than one-tenth of the packages may contain not more than four times the tolerance specified, and except that at least one defective and one offsize potato may be permitted in any package. For packages which contain 15 pounds or less, individual packages in the lot are not restricted as to the percentage of defects and offsize; provided, that not more than one-tenth of the packages may have more than one potato which is frozen or affected by soft rot or wet breakdown.

**Statutory Authority:** *MS s 30.102*

**1555.6650 BULK DISPLAY.**

All potatoes offered for sale at retail in bulk shall be displayed in bins or other open containers and shall not be represented as conforming to any grade, but may be identified as unclassified.

**Statutory Authority:** *MS s 30.102*

**1555.6660 PACKAGED POTATOES LABELING.**

Except as noted in part 1555.6710, all potatoes offered for sale in packaged form (closed containers), in addition to one of the grades specified in parts 1555.6550 to 1555.6580:

A. shall be labeled with the name "potatoes," the net weight, and the name and address, including the zip code, of the packer or distributor, and said label shall not be false or misleading in any particular. If the distributor's name is used, it shall be qualified with the word "distributor" or its equivalent. The variety of potatoes may be named on the label, and, if the variety is named, the potatoes in the labeled container shall conform to the variety named. Tag labels, as described in part 1555.6670, may be used;

B. shall not be packaged in a transparent container which is artificially colored as described in part 1555.6540; and

C. shall not be labeled unclassified.

**Statutory Authority:** *MS s 30.102*

**1555.6670 TAG LABELS.**

Tag labels may be used on unprinted new closable containers, on printed new closable containers to supply required information omitted in the printing, and on used containers which, if printed with incorrect label information, shall be turned inside out before being filled, or the incorrect information shall be removed or obliterated. Tag labels shall be printed in a color contrasting with the background. The grade designation shall be shown in letters not less than one-fourth inch high, and all other required information shall be easily readable. All label information may appear on one side of the tag but if it appears in part on both sides of the tag, the name "potatoes," the grade, and the net weight shall appear on the same side of the tag.

**Statutory Authority:** *MS s 30.102*

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## 1555.6680 GRADE EXCEPTIONS.

Packaged potatoes, the label of which declares a United States grade in lieu of a Minnesota consumer grade and which otherwise are labeled in accordance with parts 1555.6540 to 1555.6710, shall be permitted to be sold at retail in Minnesota.

**Statutory Authority:** *MS s 30.102*

## 1555.6690 PACKAGED POTATOES.

Packaged potatoes shall conform to the grade declared on the label.

**Statutory Authority:** *MS s 30.102*

## 1555.6700 USED CONTAINERS.

Used containers which are reasonably clean may be reused to market potatoes provided that they are properly labeled as provided for in parts 1555.6650 to 1555.6710.

**Statutory Authority:** *MS s 30.102*

## 1555.6710 EXCLUSION FROM GRADE LABELING REQUIREMENTS.

The grade labeling requirements of part 1555.6660, item A shall not apply to a producer who sells in closed containers potatoes of the producer's own production directly to the final consumer for said consumer's own personal use.

**Statutory Authority:** *MS s 30.102*

**History:** *17 SR 1279*

## SEED POTATO CERTIFICATION

### 1555.6720 AUTHORITY.

Parts 1555.6720 to 1555.6950 provide standards for the inspection, certification, production, and marketing of certified seed potatoes in the state of Minnesota. The authority to adopt these rules is contained in Minnesota Statutes, section 21.118.

**Statutory Authority:** *MS s 21.113*

### 1555.6730 DEFINITIONS.

Subpart 1. **General.** As used in parts 1555.6720 to 1555.6950, the following definitions apply unless the context clearly indicates otherwise.

Subp. 2. **Certified.** "Certified" has the meaning given it in Minnesota Statutes, section 21.111, subdivision 3.

Subp. 3. **Certified seed potatoes.** "Certified seed potatoes" means potatoes which have been produced, graded, sacked or placed in bulk, and inspected and certified in accordance with parts 1555.6720 to 1555.6950.

Subp. 3a. **Class.** "Class" means the seed quality level as it relates to compliance with the specified tolerances for diseases and varietal purity.

Subp. 3b. **Clone.** "Clone" means a unit of seed potatoes, being the progeny of one plant, which has been tested to become eligible to produce Primary Foundation 1 seed potatoes.

Subp. 4. **Commissioner.** "Commissioner" means the commissioner of agriculture or the commissioner's authorized representative.

Subp. 5. **Crop.** "Crop" means all lots produced on a farm in one year.

Subp. 6. **Department.** "Department" means the Department of Agriculture.

Subp. 6a. **Explant.** "Explant" means an in vitro potato plant or plantlet produced by rooting an excised tip of a tuber sprout or an axillary bud from a growing plant which serves as a parent for a whole clone or accession of micropropagated plants or plantlets.

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Subp. 7. **Farm.** "Farm" means a seed potato enterprise. It includes all land, equipment, storage facilities, and laborers used to produce certified seed potatoes.

Subp. 8. **Field.** "Field" means a plot of land on a farm on which potatoes are grown for certification. The potatoes shall be of one variety from one certified seed potato growing operation and shall be grown in physical separation from other fields.

Subp. 9. **Inspected.** "Inspected" has the meaning given it in Minnesota Statutes, section 21.111, subdivision 2.

Subp. 10. **Lot.** "Lot" means a group of seed potatoes entered for certification that have passed the field inspection requirements. For the purposes of parts 1555.6720 to 1555.6950, a lot of potatoes also means that the group is of one variety, from one or more fields, grown on the same farm, and stored in physical separation from other lots.

Subp. 10a. **Material in maintenance.** "Material in maintenance" means propagative material, plantlets, or tubers that are maintained, not multiplied under controlled laboratory conditions.

Subp. 10b. **Physical separation.** "Physical separation" means separated by at least the width of one row, or markings such as flags that are at every corner of the lot or at least 100 yards apart, whichever is less. The markings must be visible to the inspector from anywhere on the separation.

Subp. 11. **Rejected.** "Rejected" means that a field or lot fails to meet the standards provided for in parts 1555.6720 to 1555.6950.

Subp. 12. **Seed potato certification inspector.** "Seed potato certification inspector" means an employee of the department authorized by the commissioner to inspect seed potato plants and tubers entered for certification.

Subp. 13. **Seed potatoes.** "Seed potatoes" has the meaning given it in Minnesota Statutes, section 21.111, subdivision 5.

Subp. 14. **Tolerance.** "Tolerance" means a specified allowance for variation from the standards provided for diseases and physical defects, as provided in parts 1555.6720 to 1555.6950.

Subp. 15. **Tuber unit.** "Tuber unit" means the separate pieces of one tuber that are planted consecutively in two or more hills in a row.

**Statutory Authority:** *MS s 21.113; 21.118*

**History:** *21 SR 482; 24 SR 546*

## 1555.6740 GENERAL GUIDANCE.

Subpart 1. **Scope.** The provisions of this part govern the production of potatoes for use as certified seed potatoes.

Subp. 2. **Seed potato certification.** In order to produce certified seed potatoes, a grower must comply with the following procedures:

A. Potatoes entered for certification shall be inspected while growing in the field and again after harvest at the time of shipment. Certification shall be based upon visual inspection by the commissioner of sample plants and tubers from each field and lot, or for varieties that do not express visible symptoms of a specific pathogen, seed potatoes must be subjected to laboratory tests to determine the level of the pathogen in a seed lot. This testing may occur during the growing season, storage season, or winter testing. Certificates shall be issued to show the varietal purity, freedom from disease, and physical defects of the potatoes at the time of inspection.

B. Participation in the certified seed potato program shall be voluntary. The applicant may withdraw at any time. Farming and sanitation practices are the responsibility of the applicant. Certification and inspection under parts 1555.6720 to 1555.6950 shall be conducted by the commissioner. Failure of the applicant to comply with the requirements of these parts shall be cause for rejection of any field or lot. Potatoes from rejected fields or lots cannot be sold as certified seed potatoes.

Subp. 3. **Winter testing.** In order to detect certain virus diseases, samples from all classes higher than Certified class as defined in parts 1555.6840 and 1555.6845 shall be winter tested. In the event of serious malfunctions of the winter test, classification of lots in the certified classes must be based on the previous summer field readings.

Subp. 4. **Certified seed potato classes.** Seed potato certification classes are differentiated by their compliance level with disease tolerances and varietal purity. The origin of the seed also determines the class. The classes, according to their origin, in the generation system in descending order are: Prenuclear (PN), Nuclear (N), Generation 1 (G1), Generation 2 (G2), Generation 3 (G3), Generation 4 (G4), and Generation 5 (G5). Equivalent to this in the clonal system in descending order are: Primary Foundation 1 (PF1), Primary Foundation 2 (PF2), Foundation 1 (F1), Foundation 2 (F2), and Certified (C).

Subp. 5. **Certified seed potato grades.** Grades of certified seed potatoes are established according to the physical defects of the tubers. There are three grades used for shipping Minnesota certified seed potatoes.

A. The blue tag certified seed potato grade, the first grade, has tolerances for physical defects of the tubers stricter than the other grades. This grade may be used by growers of Primary Foundation certified, Foundation certified, Generation certified, and Certified seed potatoes. The blue tag grade may be used for intrastate and interstate shipments of certified seed potatoes.

B. The yellow tag certified seed potato grade is the second grade. This grade allows more physical defects of the tubers than the blue tag certified seed potato grade. It may be used by growers of Primary Foundation certified, Foundation certified, Generation certified, and Certified seed potatoes. The yellow tag grade may also be used for intrastate and interstate shipments of certified seed potatoes.

C. The white tag certified seed potato grade is the third grade. The tolerances for physical defects of the tubers are determined by agreement between purchaser and seller of the certified seed potatoes. It may only be used for intrastate shipments of certified seed potatoes.

Subp. 6. **Zero tolerance for bacterial ring rot and potato spindle tuber viroid.** Certification rules make provisions to allow the presence of certain diseases at levels sufficiently low as to preclude significant effects on certified seed potato value. For bacterial ring rot and potato spindle tuber viroid, there is a zero tolerance, and the discovery of a single plant in the field or a tuber in storage infected with one of these diseases shall cause the rejection of the field or lot. The absence of a finding shall not be construed to mean that the field or lot inspected is free from the disease.

Subp. 7. **Warranty.** A certification does not represent a warranty of any kind, express or implied, including merchantability, as to the quality of the crop produced from the certified seed potatoes. A certification represents only that the seed potatoes were produced, graded, sacked or placed in bulk, and inspected in accordance with parts 1555.6720 to 1555.6950.

**Statutory Authority:** *MS s 21.113; 21.118*

**History:** 8 SR 1659; 21 SR 482; 22 SR 1547

**1555.6750** [Repealed by amendment, 8 SR 1659]

#### **1555.6760 APPLICATION FOR INSPECTION.**

Subpart 1. **Eligibility; procedure.** All potatoes planted on a farm must be entered for certification. Application for inspection must be made before June 16 each year on forms furnished by the commissioner. Applications postmarked after June 15 but before July 1 must be charged a 50 cents per acre late registration fee. No applications may be accepted that are postmarked later than June 30. The commissioner may extend the deadline due to special circumstances, such as natural disasters, which make it impractical or impossible for planting to be completed by the deadline and which affect an area or large number of growers.

Subp. 2. **Shipping point inspection certificates, bulk seed certificates, or certificates of origin.** An application for the inspection of a field planted with purchased certified seed potatoes must include copies of either the shipping point inspection certificates, bulk seed certificates, or certificates of origin for the total amount of purchased certified seed potatoes planted. Use of certificates of origin requires approval of both the seller and the purchaser and is restricted to intrastate shipments between certified seed potato producers. The certificate of origin must contain information considered necessary by the commissioner and must at a minimum identify seed potatoes as to the producer, variety, classification, and lot. The limitation of warranty in part 1555.6740, subpart 7, must be further limited to exclude any representation as to condition of the potatoes at the time of shipment.

Subp. 3. **Separate application.** A separate application must be completed for each field planted.

Subp. 4. **Sufficient acreage.** No application for inspection may be accepted from a grower in a community or county in which there is not sufficient acreage for the total inspection fee charges to cover the cost of wages and expenses of the inspectors providing the inspection service. Determination of sufficient acreage must be made by the commissioner.

**Statutory Authority:** *MS s 21.113; 21.118*

**History:** *11 SR 2164*

**1555.6770** [Repealed, 11 SR 2164]

**1555.6780** [Repealed, 11 SR 2164]

**1555.6790** [Repealed, 11 SR 2164]

#### **1555.6800 SEED POTATOES ELIGIBLE FOR MINNESOTA CERTIFICATION PLANTING.**

Subpart 1. **Authorization.** A field may not be inspected for certification unless both the seed potato variety and the particular lot planted have the authorization of the commissioner. In considering seed potato varieties for authorization for certification planting, the commissioner shall consider scientific evidence and expert opinion. To be eligible for certification planting, seed potatoes must meet the requirements of subpart 2 or 3.

Subp. 2. **Minnesota grown seed potatoes.** The following classes of seed potatoes grown in Minnesota are eligible for planting: Prenuclear, Nuclear, Generation 1, Generation 2, Generation 3, Generation 4, Primary Foundation 1, Primary Foundation 2, Foundation 1, Foundation 2, and experimental status seed potatoes. The commissioner shall authorize the planting of Certified class or Generation 5 class seed potatoes if there is no source of higher classes than Certified class or Generation 5 class seed potatoes available to the grower and the lot has been winter tested.

Subp. 3. **Non-Minnesota grown seed potatoes.** Seed potatoes grown outside of the state approved for certification planting by the certifying agency in another state or a Canadian province may be planted if requirements for certification meet Minnesota requirements for certified seed potatoes of classes higher than Certified class or Generation 5 class, as indicated on an import affidavit.

Subp. 4. **Experimental status.** Seedlings or numbered selections may be accepted for entrance into the certification system in an experimental status. The applicant shall submit a written statement with the certification application from the breeder, originator, or originator's designee that the applicant has full and unrestricted rights to introduce the seedling or numbered selection into the commercial market, and that the seedling or numbered selection must be named within five years from acceptance of the application. If the seedling or numbered selection is not named within five years from acceptance of the application, a two-year waiting period must pass before the seedling or numbered selection may be reentered into the certification program. Seedlings or

numbered selections in experimental status must be designated as a class and conform to the requirements of that class. The word "EXPERIMENTAL" must be added on the tag. Lots from a breeder's seed that have not gone through the testing and, when necessary, virus-freeing, are considered either Foundation class 1 or 2, "EXPERIMENTAL."

Subp. 5. **Protected varieties.** Before a seed potato variety protected under the Plant Variety Protection Act Amendments of 1994 may be entered into the certification system, the applicant must submit a written statement with the certification application from the breeder, originator, or originator's designee that the applicant has full and unrestricted rights to introduce the protected variety into the commercial market.

**Statutory Authority:** *MS s 21.113; 21.118*

**History:** 8 SR 1659; 21 SR 482; 24 SR 546

**1555.6810** [Repealed, 21 SR 482]

**1555.6820** [Repealed, 21 SR 482]

**1555.6830** [Repealed, 21 SR 482]

#### **1555.6840 REQUIREMENTS FOR CERTIFIED SEED POTATO PRODUCTION.**

Subpart 1. **Requirements.** The standards in this part and part 1555.6845 must be met before potatoes may be classified as certified seed potatoes.

Subp. 2. **Field inspection and laboratory testing.** Certification must be based upon information regarding the following: stand, general vigor, varietal purity, disease tolerances, and factors affecting field inspection. At least two field inspections must be made of each field during the growing season. A final inspection must be made for bacterial ring rot, when symptom expression is optimal. If a final inspection cannot be carried out, because of management practices of the grower, or for reasons out of the grower's control, a laboratory test is necessary to maintain eligibility for certification. Additional inspections and laboratory tests may be made if necessary to meet phytosanitary requirements in established markets such as other states and Canadian provinces.

A. **Stand.** A field shall be rejected if there are a large number of plants missing due to disease.

B. **General vigor.** A field shall be rejected if it contains a large number of weak plants.

C. **Ring rot.** If bacterial ring rot is found in any field or lot, the remaining crop is not eligible for certification planting.

D. **Varietal purity.** A field must be rejected if it contains more than the tolerances acceptable for a specific class as listed in Tables 1 and 2 in part 1555.6845, subparts 11 and 12.

E. **Disease tolerances (percentage of infected plants).** A field must be rejected if it contains percentages of diseased plants in excess of those acceptable for a specific class as listed in Tables 1 and 2 in part 1555.6845, subparts 11 and 12.

F. **Factors affecting field inspection.** A field shall be rejected if any of the following are present to such an extent that satisfactory inspection for diseases cannot be made: early or late blight; blackleg or wilt of any kind; weeds; insect injury; chemical damage.

A field shall be rejected if any other conditions are present to such an extent that satisfactory inspection for diseases cannot be made. A field is ineligible for certification if there are cull piles in such close vicinity to the field that contamination of the field can be expected.

Subp. 3. **Roguing.** If any of the diseases listed in part 1555.6845 are present in a field in amounts less than the maximum disease tolerance level, the field must be rogued and the infected plants removed before the final inspection. If roguing is done

after tubers form, the tubers from the rogued plants shall also be removed and destroyed.

Subp. 4. **Storage.** Lots shall not be stored in any warehouse where other potatoes are stored, nor shall they be stored under conditions of possible disease contamination. If more than one grower stores lots in the same warehouse, each grower's lots shall be properly identified by labeling the bin with the grower's name and address, variety, and amount in the bin. If the lots are to be stored in a public warehouse or storage unit not directly under the control of the grower, a complete record giving location of the storage unit, number of the bin, variety, and the quantity stored shall be sent to the commissioner when the lots are put into storage. If it is available, a copy of the warehouse receipt shall also be sent to the commissioner.

Equipment used for grading and handling lots shall not be used for any other potatoes. If any equipment is used on other potatoes, the lots shall be rejected.

Any firm handling lots on contract shall label all bins containing lots with the name of the grower whose lots are being stored. Responsibility for proper labeling and subsequent handling rests with the firm. No certification tags or bulk certificates shall be issued until this is done.

Each grower shall submit a completed storage and yield report on each lot on forms furnished by the commissioner. Certification tags shall not be issued to growers who have not submitted the report.

Subp. 5. **Tags and bulk certificates.** Official blue, yellow, or white tags, bearing the grower's name and address, the potato variety, and the crop year shall be issued when the potatoes meet the certification requirements described in parts 1555.6740 to 1555.6845. Tags shall be fastened onto sacks so as to constitute a seal at the time the lots are prepared for shipment. Bulk certificates must also show the date of issuance, the class, the grade, and the approximate weight of the load.

Tags shall be issued only to growers, except when lots are stored in a public warehouse or in a storage unit not under direct control of the grower. They shall be issued to the owner or manager of the storage unit upon receipt of written authorization from the grower.

Responsibility for ordering tags shall rest entirely with each grower.

Subp. 6. **Grading.** All lots shall be inspected at the loading point whenever possible. If inspection at the loading point is impossible, request for grading inspection in transit shall be made. Every bagged lot or shipment offered for sale and bearing official certification tags shall be in new even-weight sacks. Bulk shipments shall be identified with a bulk certificate. Both bagged and bulk lots or shipments must meet grade standards specified in part 1555.6950. Lots or shipments that fail to meet grade standards when inspected shall be reconditioned, or:

A. if the lot or shipment is in sacks, the tags shall be removed under the supervision of a state or federal/state inspector before the lot or shipment is allowed to proceed to its destination; and

B. if the shipment is in bulk, no bulk certificate shall be issued.

All costs of reconditioning to meet grade shall be borne by the shipper.

**Statutory Authority:** *MS s 21.113; 21.118*

**History:** *11 SR 335; 17 SR 438; 21 SR 482; 24 SR 546*

#### 1555.6845 REQUIREMENTS FOR PRODUCTION OF DIFFERENT CLASSES OF CERTIFIED SEED POTATOES.

##### Subpart 1. Prenuclear class certified seed potatoes (PN).

A. A lot grown as and intended to be Prenuclear must be grown from plants tested and shown to be free from the following pathogens:

- (1) *Clavibacter michiganensis ssp. sepedonicus* (ring rot);
- (2) *Erwinia carotovora* (blackleg);



- (3) potato virus X;
- (4) potato virus S;
- (5) potato virus A;
- (6) potato virus M;
- (7) potato virus Y;
- (8) potato spindle tuber viroid; and
- (9) potato leaf roll virus.

Each initial explant or tuber must also have been tested for any other organisms for which testing is required by the phytosanitary requirements in another state or Canadian province. Material in maintenance must have been tested during the year of the production of pre-nuclear class.

B. Pre-nuclear class seed potatoes must be produced in a greenhouse or screenhouse under sanitary conditions, free from insects and weeds that can harbor or transmit potato diseases or other conditions of possible disease contamination. All facilities must be sufficiently insulated from insects by screens and double doors. The facilities and the equipment are subject to inspection to verify freedom from possible disease contamination.

C. One percent of each lot or ten plants or tubers from each lot, whichever is greater, must be tested during the growing season to verify that the crop is free from potato virus X, potato virus Y, potato leaf roll virus, *C. michiganensis*, and *E. carotovora*.

D. Pre-nuclear tubers may originate from greenhouse tubers for one year only if the greenhouse tubers have remained at the same growing operation and have remained isolated from field-grown tubers.

E. A lot must be rejected if it contains any diseased plants at any inspection, or varietal mixture at final inspection.

F. The allowable tolerances for disease and varietal mixture for seed potatoes classified as pre-nuclear are in Table 1 in subpart 11 under column PN.

**Subp. 2. Nuclear class certified seed potatoes (N).** Nuclear class seed potatoes must meet the following requirements:

- A. The seed source must be either Pre-nuclear tubers or plantlets.
- B. Tubers or plantlets must be planted in identifiable family units.
- C. Each field must be tested during the growing season for potato virus X. For a lot to be tagged "virus tested (VT)," no more than one percent of the plants tested may be infected with potato virus X.
- D. Each lot must be stored in an individual identifiable unit.
- E. The allowable tolerances for disease and varietal mixture for seed potatoes classified as Nuclear are in Table 1 in subpart 11 under column N.

**Subp. 3. Generation 1 class certified seed potatoes (G1).** Generation 1 class seed potatoes must originate from Nuclear class seed potatoes. Each field may be tested during the growing season for potato virus X at grower's request. For a lot to be tagged "virus tested (VT)," no more than three percent of the plants tested may be infected with potato virus X. The allowable tolerances for disease and varietal mixture are in Table 1 in subpart 11 under column G1.

**Subp. 4. Generation 2 class certified seed potatoes (G2).** Generation 2 class seed potatoes must originate from Generation 1 class seed potatoes. The allowable tolerances for disease and varietal mixture are in Table 1 in subpart 11 under column G2.

**Subp. 5. Generation 3 class certified seed potatoes (G3).** Generation 3 class seed potatoes must originate from Generation 2 class seed potatoes. The allowable tolerances for disease and varietal mixture are in Table 1 in subpart 11 under column G3.

**Subp. 6. Generation 4 class certified seed potatoes (G4).** Generation 4 class seed potatoes must originate from Generation 3 class seed potatoes. The allowable tolerances for disease and varietal mixture are in Table 1 in subpart 11 under column G4.

Subp. 7. **Generation 5 class certified seed potatoes (G5).** Generation 5 class seed potatoes must originate from Generation 4 class seed potatoes. The allowable tolerances for disease and varietal mixture are in Table 1 in subpart 11 under column G5.

Subp. 8. **Primary Foundation classes (PF).**

A. A lot grown as and intended to be Primary Foundation certified seed potatoes must originate from clonal selection, with all clones laboratory tested and be proven free from the following pathogens:

- (1) *Clavibacter michiganensis ssp. sepedonicus* (ring rot);
- (2) potato virus A;
- (3) potato virus M;
- (4) potato virus Y;
- (5) potato spindle tuber viroid; and
- (6) potato leaf roll virus.

B. A lot must be kept under direct control of the grower and must not be stored in any warehouse in which other potatoes are stored.

C. The two classes of Primary Foundation seed potatoes are PF1 and PF2.

(1) PF1 class certified seed potatoes must originate from clonal multiplication where all clones have been laboratory-tested. PF1 class seed potatoes are tuber united. Crops must be free of bacterial ring rot for a minimum of two years to be eligible to be PF1 class seed potatoes. The allowable tolerances for disease and variety mixture are in Table 2 in subpart 12 under column PF1.

(2) PF2 class certified seed potatoes must originate from PF1 class seed potatoes and originate from the same farm operation. They must be grown from potatoes produced on a tuber unit seed plot. Crops must be free of bacterial ring rot for a minimum of two years to be eligible to be PF2 class seed potatoes. The allowable tolerances for disease and varietal mixture are in Table 2 in subpart 12 under column PF2.

Subp. 9. **Foundation classes (F).** The two classes of Foundation class seed potatoes are F1 and F2.

A. F1 class certified seed potatoes must originate from Primary Foundation class seed potatoes. The allowable tolerances for disease and varietal mixture are in Table 2 in subpart 12 under column F1.

B. F2 class certified seed potatoes must originate from F1 class seed potatoes. The allowable tolerances for disease and varietal mixture are in Table 2 in subpart 12 under column F2.

Subp. 10. **Certified class certified seed potatoes.** Certified class seed potatoes must originate from Foundation or Generation classes of seed potatoes. This class is not winter tested. The allowable tolerances for disease and varietal mixture are in subpart 11, Table 2, under column C.

Subp. 11. **Table 1.**

TABLE 1  
TOLERANCES FOR DISEASES AND VARIETAL  
MIXTURE FOR GENERATION CLASSES

	CLASSES						
	PN	N	G1	G2	G3	G4	G5
Severe Mosaic	0	0.1	0.2	0.2	0.3	0.3	0.4
Leaf roll	0	0.1	0.2	0.2	0.3	0.3	0.4
Total	0	0.1	0.2	0.2	0.3	0.3	0.4
Total other viruses (S and X excluded)	0	0.1	0.2	0.2	0.3	0.3	0.4

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Mycoplasmas	0	0.1	0.2	0.2	0.3	0.3	0.4
Total	0	0.1	0.2	0.2	0.3	0.3	0.4
Mild Mosaic (S)	0						
Mild Mosaic (X)	0	VT:1	VT:3	VT:3	VT:3	VT:3	VT:3
Blackleg	0	0	0.2	0.5	1.0	exc.	exc.
Varietal Mixture	0	0	0	0	0.1	0.1	0.2
Ring Rot and Spindle Tuber	0	0	0	0	0	0	0
Winter Test:							
Virus, Ch. Dam.		0.5	0.5	0.5	0.5	0.5	
BRR, PSTV		0	0	0	0	0	
Summer Test:							
PVX, VT*	0	1.0	3.0	3.0	3.0	3.0	3.0
Virus, BRR, PSTV	0						

Numbers represent percentages

VT means Virus Tested

Mycoplasmas: Haywire, Witches Broom, Yellow Dwarf

Severe Mosaic: PVY, PVA, PVM

BRR means Bacterial Ring Rot

PSTV means Potato Spindle Tuber Viroid

Ch. Dam. means Expressing symptoms of chemical damage

\* For the classes G1 and lower, the summer test for PVX is done on request of the grower only. The lot may be labeled "Virus Tested," if the tolerance of one percent for N and three percent for the lower classes is met.

### Subp. 12. Table 2.

TABLE 2

#### TOLERANCES FOR DISEASES AND VARIETAL MIXTURE FOR CLASSES ORIGINATING FROM CLONAL MULTIPLICATION

	CLONE	CLASSES					C
		PF1	PF2	F1	F2		
Severe Mosaic	0	0.1	0.2	0.3	0.3	1.00	
Leaf roll	0	0.1	0.2	0.3	0.3	0.3	
Total	0	0.1	0.2	0.3	0.3	1.0	
Total other viruses (S and X excluded)	0	0.1	0.2	0.3	0.3	0.5	
Mycoplasmas	0	0.1	0.2	0.3	0.3	0.5	
Total	0	0.1	0.2	0.3	0.3	0.5	
Mild Mosaic (S)							
Mild Mosaic (X)							
Blackleg		0.1	0.2	exc.	exc.	exc.	
Varietal Mixture				0.1	0.2	0.2	
Ring Rot and Spindle Tuber	0	0	0	0	0		
Winter Test:							
Virus, Ch. Dam.		0.5	0.5	0.5	0.5		
BRR, PSTV		0	0	0	0		
Summer Test:							
Virus, BRR, PSTV	0						

Numbers represent percentages

VT means Virus Tested

Mycoplasmas: Haywire, Witches Broom, Yellow Dwarf

Severe Mosaic: PVY, PVA, PVM

BRR means Bacterial Ring Rot

PSTV means Potato Spindle Tuber Viroid  
Ch. Dam. means Expressing symptoms of chemical damage.

**Statutory Authority:** *MS s 21.118*

**History:** *21 SR 482; 24 SR 546*

**1555.6850** [Repealed, 21 SR 482]

**1555.6851** [Repealed, 21 SR 482]

**1555.6852** [Repealed, 21 SR 482]

**1555.6860** [Repealed, 21 SR 482]

**1555.6870** [Repealed, 21 SR 482]

**1555.6880** [Repealed, 21 SR 482]

**1555.6890** [Repealed, 21 SR 482]

**1555.6900** [Repealed, 21 SR 482]

**1555.6910 FEES.**

Fees shall be set by the commissioner in amounts necessary to carry out the seed potato certification service. Fees shall be reviewed annually and notice of the current fee schedule sent to growers from time to time.

**Statutory Authority:** *MS s 21.113*

**1555.6920 FIELD INSPECTION FEES.**

Field inspection fees shall be paid at time of application for entry into the certification program.

**Statutory Authority:** *MS s 21.113*

**1555.6930 WINTER-TESTING FEES.**

Winter-testing fees shall be paid before results are sent to the grower.

**Statutory Authority:** *MS s 21.113*

**1555.6940 FEES FOR OTHER DISEASE TESTING.**

Fees for other disease testing shall be paid before results are listed in the Minnesota Seed Potato Certification Directory.

**Statutory Authority:** *MS s 21.113*

**1555.6950 MINNESOTA CERTIFIED SEED POTATO GRADES AND TOLERANCES.**

Subpart 1. **Minnesota certified seed potato grades.** Before potatoes are eligible for grading as certified seed potatoes, the requirements of parts 1555.6750 to 1555.6845 must be met.

Subp. 2. **Minnesota blue tag certified seed potato grade.** To be graded as Minnesota blue tag certified seed potatoes, the potatoes must meet the requirements in items A to C.

A. Condition. The potatoes must be, at the time of final inspection, of one variety, unwashed, fairly well-shaped, free from bacterial ring rot, powdery scab, late blight, freezing, black heart, and soft rot or wet breakdown, and free from damage caused by soil or other foreign matter, second growth, air cracks, cuts, shriveling, sprouts, pitted scab, surface scab, russet scab, dry rot, other diseases, insects or worms, mechanical or other means, flattened or depressed areas with underlying flesh discolor-

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ation, and from serious damage caused by hollow heart, wire worm, growth cracks, or internal discoloration other than hollow heart. Sunburn and silver scurf are not factors.

B. Size. For round or intermediate shaped varieties, the maximum size shall be not more than 12 ounces (340.2 grams) and, unless otherwise specified, the minimum size shall be not less than 1-1/2 inches (38.1 millimeters) in diameter. For long varieties, the maximum size shall be not more than 14 ounces (396.9 grams) and, unless otherwise specified, the minimum size shall be not less than 1-1/2 inches (38.1 millimeters) in diameter. For all varieties, size "B," the minimum diameter shall be not less than 1-1/2 inches (38.1 millimeters) and the maximum size shall be not more than 2-1/4 inches (57.1 millimeters) in diameter.

C. Lot tolerances. In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, are provided:

(1) For defects:

- (a) ten percent for potatoes seriously damaged by hollow heart;
- (b) five percent for potatoes seriously damaged by internal discoloration (other than hollow heart);
- (c) ten percent for potatoes damaged by soil or other foreign matter;
- (d) 20 percent for potatoes damaged by sprouts;
- (e) ten percent for potatoes seriously damaged by wireworm; and
- (f) six percent for potatoes which fail to meet the remaining requirements of the grade, provided that included in that amount not more than the following percentages are allowed for the following defects:
  - i. soft rot, frozen, or wet breakdown, 0.5 percent;
  - ii. damage by surface or pitted scab, 2.0 percent;
  - iii. damage by dry rot, 2.0 percent, of which not more than 1.0 percent late blight tuber rot;
  - iv. bacterial ring rot, 0.0 percent;
  - v. powdery scab, 0.0 percent; and
  - vi. late blight tuber rot, 1.0 percent; and
- (g) the following do not affect seed quality and must not be scored against the grade:
  - i. brown discoloration following skinning;
  - ii. dried stems;
  - iii. flattened or depressed areas showing no underlying flesh discoloration;
  - iv. greening;
  - v. sunburn;
  - vi. skin checks; and
  - vii. silver scurf.

(2) For offsize:

- (a) five percent for potatoes which fail to meet the required or specified minimum size; and
- (b) ten percent for potatoes which fail to meet the required maximum size.

Subp. 3. [Repealed, 22 SR 1547]

Subp. 3a. **Minnesota yellow tag certified seed potato grade.** To be graded as Minnesota yellow tag certified seed potatoes, the potatoes must meet the requirements in items A to D.

A. Condition. At the time of final inspection, the potatoes must be of one variety, unwashed, fairly well-shaped, free from bacterial ring rot, powdery scab, late blight, freezing, black heart, and soft rot or wet breakdown, and free from damage caused by second growth, air cracks, cuts, shriveling, pitted scab, surface scab, dry rot,

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other diseases, insects or worms, mechanical means or other means, and from serious damage caused by soil or other foreign matter, hollow heart, wireworm, growth cracks, russet scab, or internal discoloration other than hollow heart. Sunburn and silver scurf are not factors.

B. Size. For all varieties, the maximum size is 14 ounces (396.9 grams) and the minimum size is 1-1/2 inch (38.1 mm) in diameter. For all varieties, the minimum diameter for size "B" shall not be less than 1-1/2 inches (38.1 millimeters) and the maximum diameter shall not be more than 2-1/4 inches (57.1 millimeters). The department may grade potatoes that do not meet the maximum and minimum size specifications as Minnesota yellow tag certified seed potatoes if the buyer agrees to accept potatoes of alternate size specifications from the grower and these specifications are listed on the tag or bulk inspection certificate issued by the department.

C. Lot tolerances. In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, are provided:

(1) for defects:

(a) 20 percent for potatoes seriously damaged by hollow heart;

(b) five percent for potatoes seriously damaged by internal discoloration (other than hollow heart);

(c) ten percent for potatoes seriously damaged by soil or other foreign matter;

(d) ten percent for potatoes seriously damaged by wireworm;

(e) 20 percent for potatoes that fail to meet the remaining requirements of the grade with not more than six percent serious damage provided that included in that amount not more than the following percentages are allowed for the following defects:

i. soft rot, frozen, or wet breakdown, 0.5 percent;

ii. damaged by surface or pitted scab, 5.0 percent;

iii. damaged by dry rot, 2.0 percent, of which not more than 1.0 percent is late blight tuber rot;

iv. bacterial ring rot, 0.0 percent;

v. powdery scab, 0.0 percent; and

vi. late blight tuber rot, 1.0 percent; and

(f) the following do not affect seed quality and must not be scored against the grade:

i. brown discoloration following skinning;

ii. dried stems;

iii. flattened or depressed areas with or without underlying flesh discoloration;

iv. greening;

v. sunburn

vi. skin checks;

vii. silver scurf; and

viii. sprouts; and

(2) for offsize:

(a) five percent for potatoes that fail to meet the required or specified minimum size; and

(b) ten percent for potatoes that fail to meet the required maximum size.

D. Shape. The potatoes must be fairly well shaped, with an exception for long varieties when specified as "except for shape." In that case the tubers may be misshapen.

Subp. 4. **Minnesota white tag certified seed potato grade.** Minnesota white tag certified seed potato grade consists of certified seed potatoes that are graded according to agreement between the seller and the purchaser as to size and defects, except that not more than one-half percent of soft rot, frozen, or wet breakdown and two percent dry rot, of which not more than one percent late blight tuber rot is allowed.

The use of the white tag certified seed potato grade must be restricted to intrastate shipments.

Subp. 5. **Application of tolerance.** The contents of individual containers, other than bulk conveyances, in the lot are subject to the following limitations provided that the averages for the entire lot are within the tolerances specified for the grade. An individual container in any lot may contain not more than double the tolerance specified except for sprouts and except that at least one defective specimen, other than bacterial ring rot or powdery scab, and one offsize specimen may be permitted in any container.

Subp. 6. **Condition after transit.** Deterioration developing in transit shall be considered as affecting condition and not grade.

Subp. 7. **Definitions.** For the purpose of this part, the terms in items A to J have the meanings given them unless the context clearly indicates otherwise.

A. "Mature" means that the outer skin (epidermis) does not loosen or "feather" readily during the ordinary methods of handling.

B. "Well-shaped" means the normal shape for the variety.

C. "Fairly well-shaped" means that the individual potato is not materially pointed, dumbbell-shaped, or otherwise ill-formed.

D. "Fairly clean" means that the individual potato is reasonably free from dirt, staining, or other foreign matter.

E. "Slightly dirty" means that the appearance of the individual potato is not materially affected by dirt, staining, or other foreign matter.

F. "Diameter" means the greatest dimension at right angles to the longitudinal axis. The long axis shall be used without regard to the position of the stem (stolon).

G. "Soft rot or wet breakdown" means any soft, mushy, or leaky condition of the tissues.

H. "Dry rot" means decaying tissue that is dry.

I. "Damage" means any defect or combination of defects which materially affects the appearance of the individual potato or which cannot be removed without a loss of more than five percent of the total weight of the potato including the peel covering the defective area. Any one of the following defects or any combination of defects, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as damage:

(1) russet scab when it materially detracts from the appearance of the individual potato;

(2) second growth or growth cracks which have developed to such an extent as to materially affect the appearance of the individual potato;

(3) air cracks when removal causes a loss of more than five percent of the total weight of the potato;

(4) shriveling when the potato is more than moderately shriveled, spongy, or flabby;

(5) sprouting when the individual potato has sprouts over one inch in length;

(6) surface or pitted scab, individually or in combination, which covers an area of more than five percent of the surface of the potato in the aggregate, or causes a loss of more than five percent of the total weight of the potato including peel covering defective area;

(7) soil if the individual potato has more than 50 percent of its surface affected by lightly caked soil which is scattered, or more than 15 percent of its surface badly caked with soil.

J. "Serious damage" means any defect or combination of defects which seriously affects the appearance of the individual potato or which cannot be removed without a loss of more than ten percent of the total weight of the potato including the peel covering the defective area. Any one of the following defects or any combination of defects, the seriousness of which exceeds the maximum allowed for any one defect shall be considered as serious damage:

(1) russet scab when it seriously detracts from the appearance of the potato;

(2) dirt when the appearance of the individual potato is seriously affected by caked or smeared dirt or other foreign matter;

(3) cuts when both ends are clipped or when more than an estimated one-fourth of the potato is cut away from one end or when the remaining portion of the clipped potato weighs less than six ounces;

(4) other cuts which seriously affect the appearance, of the individual potato or which cannot be removed without a loss of more than ten percent of the total weight of the potato including peel covering defective area;

(5) shriveling when the potato is excessively shriveled, spongy, or flabby;

(6) surface or pitted scab, individually or in combination, which covers an area of more than 25 percent of the surface of the potato in the aggregate, or causes a loss of more than ten percent of the total weight of the potato including peel covering defective area;

(7) wireworm and air cracks when removal causes a loss of more than ten percent of the total weight of the potato.

**Statutory Authority:** *MS s 21.113; 21.118*

**History:** *8 SR 1659; 11 SR 1407; 12 SR 1809; 17 SR 1829; 21 SR 482; 22 SR 1547*

### **TOM AND JERRY BATTER, TOM AND JERRY MIX**

#### **1555.7410 TOM AND JERRY BATTER, TOM AND JERRY MIX.**

"Tom and Jerry batter," "Tom and Jerry mix," is a manufactured food product consisting of water and sugar or other approved sweeteners to which are added spices and fresh, frozen, or dried egg yolks or whole eggs with or without Grade A dairy products, approved stabilizers, flavors, colors, and emulsifiers.

**Statutory Authority:** *MS s 31.10*

#### **1555.7420 TOM AND JERRY BASE.**

"Tom and Jerry base" is a manufactured food product containing all of the ingredients of Tom and Jerry batter, Tom and Jerry mix, except that water has been omitted or removed.

**Statutory Authority:** *MS s 31.10*

#### **1555.7430 LABELING.**

The name of the food product is "Tom and Jerry batter," "Tom and Jerry mix," and the name of the base is "Tom and Jerry base." The name of the product "Tom and Jerry batter," "Tom and Jerry mix" shall be qualified by the word "pasteurized" and if it is homogenized, the word "homogenized."

**Statutory Authority:** *MS s 31.10*

#### **1555.7440 LABELING WHEN ARTIFICIAL COLORING IS USED.**

When any artificial coloring is used in Tom and Jerry batter, Tom and Jerry mix, or Tom and Jerry base, directly or as a component of any ingredient, the label shall



bear the words "artificially colored" or "\_\_\_\_\_ an artificial color added," the blank being filled with the common or usual name of the artificial color; or, in lieu thereof, in case the artificial color is a component of another ingredient, "\_\_\_\_\_ artificially colored."

**Statutory Authority:** *MS s 31.10*

#### **1555.7450 LABELING WHEN ARTIFICIAL FLAVOR IS USED.**

When artificial flavor is used in Tom and Jerry batter, Tom and Jerry mix, or Tom and Jerry base, either directly or as a component of any ingredient, the label shall bear the words "artificial flavor added" or "artificial \_\_\_\_\_ flavor added," the blank being filled in with the common name of the flavor simulated by the artificial flavor. If both artificial color and artificial flavorings are used, the label statements may be combined.

**Statutory Authority:** *MS s 31.10*

#### **1555.7460 PASTEURIZATION.**

Every particle of Tom and Jerry batter, Tom and Jerry mix, shall be heated to a temperature of not less than 155 degrees Fahrenheit and held at that temperature for not less than 30 minutes in properly operated equipment approved by the commissioner, or to a temperature of not less than 175 degrees Fahrenheit and held at that temperature for not less than 25 seconds in properly operated equipment approved by the commissioner. Nothing contained in this part shall be construed as excluding any other process which has been demonstrated to be equally efficient and is approved by the commissioner.

**Statutory Authority:** *MS s 31.10*

#### **1555.7470 COOLING.**

Immediately after pasteurization such Tom and Jerry batter, Tom and Jerry mix, shall be cooled in properly operated equipment approved by the commissioner to a temperature of 50 degrees Fahrenheit, or lower, and held at such temperature until delivered to the final consumer.

**Statutory Authority:** *MS s 31.10*

#### **1555.7480 RECORDS.**

A recording thermometer record chart, properly completed, identified, and dated, of each batch of Tom and Jerry batter, Tom and Jerry mix, pasteurized and cooled shall be available at the plant of pasteurization at all reasonable times for examination by the commissioner or the commissioner's agents and shall be retained for a period of three months.

**Statutory Authority:** *MS s 31.10*

**History:** *17 SR 1279*

#### **1555.7490 BACTERIAL COUNTS AND COLIFORM COUNTS.**

At no time after pasteurization and cooling shall Tom and Jerry batter, Tom and Jerry mix, have a bacterial count exceeding 20,000 bacteria per gram, standard plate count, nor a coliform count exceeding ten coliforms per gram nor a temperature above 50 degrees Fahrenheit in more than two of the last four consecutive samples taken on separate days.

**Statutory Authority:** *MS s 31.10*

#### **1555.7500 SANITATION.**

Establishments in which Tom and Jerry batter, Tom and Jerry mix, or Tom and Jerry base are manufactured shall conform to all of the applicable items of sanitation described under parts 1525.0720 to 1525.1350; 1525.1360, 1525.1370, 1525.1390 and 1525.1410; provided, that if the room or rooms where such Tom and Jerry batter, Tom

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## 1555.7500 FOOD DEFINITIONS AND STANDARDS

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and Jerry mix, or Tom and Jerry base are manufactured, packaged, and stored and equipment and utensils are washed are not wet locations, the construction requirements of parts 1525.0730 to 1525.0740 and 1525.0770 to 1525.0830, and the plumbing and liquid waste disposal requirements of parts 1525.0960 to 1525.0970 shall be satisfied if:

A. the floors of such room or rooms are impervious or are solid floors covered with tightly sealed, approved washable material and are kept clean and in good repair;

B. the walls and ceilings of such room or rooms are smooth, washable, light-colored, and are kept clean and in good repair;

C. said room or rooms are used for no other purpose at the time when such products are being manufactured, pasteurized, cooled, further processed and/or packaged; and

D. liquid wastes from drip, spillage, and washing of utensils and equipment are disposed of in accordance with the provisions of Minnesota Plumbing Code, as adopted by Minnesota Department of Health, October 16, 1951.

**Statutory Authority:** *MS s 31.10*