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EMPLOYEE RIGHT-TO-KNOW STANDARDS 5206.0100

## CHAPTER 5206

### DEPARTMENT OF LABOR AND INDUSTRY EMPLOYEE RIGHT-TO-KNOW STANDARDS

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#### 5206.0100 DEFINITIONS.

Subpart 1. **Scope.** For purposes of this chapter the following terms have the meanings given them.

Subp. 2. **Commissioner.** "Commissioner" means the commissioner of the Department of Labor and Industry.

Subp. 3. **Data sheet.** "Data sheet" means a document, such as a material safety data sheet, operation standard, placard or display device, used by an employer to communicate to an employee the information required under Minnesota Statutes, section 182.653, subdivisions 4b, 4c, and 4e.

Subp. 4. **Department.** "Department" means the Department of Labor and Industry.

Subp. 5. **Display device.** "Display device" means a video screen or video display terminal that is part of electronic data processing equipment.

Subp. 6. **Harmful physical agent.** "Harmful physical agent" means a physical agent determined by the commissioner as part of the standard for that agent to present a significant risk to worker health or safety or imminent danger of death or serious physical harm to an employee.

"Harmful physical agent" does not include an agent being developed or utilized by a technically qualified individual in a research, medical research, medical diagnostic, or medical educational laboratory, or in a health care facility or in a clinic associated with the laboratory or health care facility, or in a pharmacy registered and licensed under Minnesota Statutes, chapter 151. This exemption does not include a physical agent utilized in a laboratory that primarily provides a quality control analysis for a manufacturing process. This exemption applies only to technically qualified individuals and not to persons working in the same work area who are not technically qualified individuals.

Subp. 7. **Hazardous substance.** "Hazardous substance" means a chemical or substance, or mixture of chemicals or substances, which:

A. is regulated by the federal Occupational Safety and Health Administration under Code of Federal Regulations, title 29, part 1910, subpart Z;

B. is either toxic or highly toxic, an irritant, corrosive, a strong oxidizer, a strong sensitizer, combustible, either flammable or extremely flammable, dangerously reactive, pyrophoric, pressure-generating, a compressed gas, a carcinogen, a teratogen, a mutagen, a reproductive toxic agent, or that otherwise, according to generally accepted documented medical or scientific evidence, may cause substantial acute or chronic personal injury or illness during or as a direct result of any customary or reasonably foreseeable accidental or intentional exposure to the chemical or substance; or

C. is determined by the commissioner as part of the standard for the chemical or substance or mixture of chemicals and substances to present a significant risk to worker health and safety or imminent danger of death or serious physical harm to an employee as a result of foreseeable use, handling, accidental spill, exposure, or contamination.

Hazardous substance does not include a substance being developed or handled by a technically qualified individual in a research, medical research, medical diagnostic or medical educational laboratory or in a health care facility or in a clinic associated with the laboratory or health care facility, or in a pharmacy registered or licensed under Minnesota Statutes, chapter 151. This exemption applies only to technically qualified individuals and not to persons working in the same work area who are not technically qualified individuals.

**Subp. 8. Health care facility.** "Health care facility" means a clinic, hospital, or nursing home.

**Subp. 9. Impurity.** "Impurity" means a hazardous substance which is unintentionally present with another substance or mixture.

**Subp. 10. Immediate-use container.** "Immediate-use container" means a container into which substances are transferred from labeled containers and which is intended only for the immediate use of the employee who performs the transfer, or a test tube, beaker, vial, or similar container which is routinely used and reused.

**Subp. 11. Infectious agent.** "Infectious agent" means a communicable bacterium, virus, or fungus determined by the commissioner by rule, with approval of the commissioner of health, which according to documented medical or scientific evidence causes substantial acute or chronic illness or permanent disability as a foreseeable and direct result of any routine exposure to the infectious agent.

Infectious agent does not include an agent in or on the body of a patient before diagnosis. Infectious agent does not include an agent being developed or regularly utilized by a technically qualified individual in a research, medical research, medical diagnostic or medical educational laboratory or in a health care facility or in a clinic associated with a laboratory or health care facility, or in a pharmacy registered and licensed under Minnesota Statutes, chapter 151. This exemption does not include an infectious agent utilized in a laboratory that primarily provides a quality control analysis for a manufacturing process.

**Subp. 12. Manufacturer.** "Manufacturer" means anyone who produces, synthesizes, extracts, or otherwise makes, processes, blends, packages, or repackages a hazardous substance or harmful physical agent. The term manufacturer also includes anyone who imports into this state or distributes within this state a hazardous substance or harmful physical agent. It does not include anyone whose primary business concerning the hazardous substance or harmful physical agent is in retail sales to the public.

**Subp. 13. Material safety data sheet.** "Material safety data sheet" means any data sheet which contains information required under Minnesota Statutes, section 182.653, subdivisions 4b, 4c, and 4e regarding the physical, chemical, and hazardous properties of a substance or mixture. The OSHA form 20 is one example of a material safety data sheet.

**Subp. 14. Mixture.** "Mixture" means any combination of two or more chemical substances that do not react with each other, but at least one of which is a hazardous substance. Mixtures may be considered as a single hazardous substance if the technical data provided for the mixture as a whole is as effective in protecting employee health as data on each of the individual components would be.

**Subp. 15. Process container.** "Process container" means a container into which a substance is transferred from a labeled container which is used to contain no more than the quantity needed for one day's process in the workplace.

**Subp. 16. Research laboratory.** "Research laboratory" means a medical, educational, industrial, or manufacturing workplace, or portion of such a work-

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place, engaged in the development of materials, products, or substances through experimentation, testing, or analysis. Research laboratory includes pilot plant operations performed as research and development functions including tests of physical, chemical, production, and performance characteristics.

**Subp. 17. Routinely exposed.** "Routinely exposed" means a reasonable potential for exposure exists during the normal course of assigned work. It includes the exposure of an employee to a hazardous substance when assigned to work in an area where a hazardous substance has been spilled. It does not include a simple walk-through of an area where a hazardous substance, harmful physical agent, or infectious agent is present or an assignment to work in an area where a container of a hazardous substance is present but there is no actual exposure unless a spill should occur.

**Subp. 18. Small business.** "Small business" means a business entity organized for profit, including any individual, partnership, corporation, joint venture, association, or cooperative which has 20 or fewer full-time employees, or equivalent full-time employees (part-time employees' work time combined to total 2,000 hours or the equivalent of one full-time employee) during the preceding fiscal year or not more than \$1,000,000 in annual gross revenues in the preceding fiscal year, and which is not an affiliate or subsidiary of a business having more than 20 full-time, or equivalent full-time, employees and more than \$1,000,000 in annual gross revenues.

**Subp. 19. Technically qualified individual.** "Technically qualified individual" means a person in a research, medical research, medical diagnostic or medical educational laboratory or in a health care facility or in a clinic associated with the laboratory or health care facility, or in a pharmacy registered and licensed under Minnesota Statutes, chapter 151, who, because of professional or technical education, training, or experience, understands, prior to the time of exposure, the health risks and the necessary safety precautions associated with each hazardous substance, harmful physical agent, infectious agent, or mixture handled or utilized by the person.

**Statutory Authority:** *MS s 182.655*

**History:** *8 SR 1949*

### 5206.0200 PURPOSE.

The standards in this chapter implement the provisions of the Employee Right-to-Know Act of 1983. These standards require employers to evaluate their workplaces for the existence of hazardous substances, harmful physical agents, and infectious agents and to provide training and information to those employees covered under this act who are routinely exposed to those substances and agents.

**Statutory Authority:** *MS s 182.655*

**History:** *8 SR 1949*

### 5206.0300 SCOPE; EXCEPTIONS.

**Subpart 1. In general.** The provisions in this chapter apply to all employers and employees in Minnesota with the following exceptions in subparts 2 to 6.

**Subp. 2. Technically qualified individuals.** Certain technically qualified individuals in a research laboratory or in a hospital or clinic who meet the criteria defined in part 5206.0900 are exempt from the provisions of this chapter.

**Subp. 3. Farms.** Farming operations employing ten or fewer employees are exempt from all provisions of this chapter except that label information must be furnished to employees or their representative. Farming operations employing more than ten employees or that operate a temporary labor camp will be required to comply with training requirements developed by the commissioner specifically for farming operations.

**Subp. 4. Small businesses.** Small businesses are exempt from the provisions of this chapter relative to hazardous substances and harmful physical agents.

**Subp. 5. Hospitals and clinics.** Hospitals and clinics that meet the definition of a small business are exempt from the provisions of this chapter relative to hazardous substances and harmful physical agents but must comply with the infectious agents provisions of this chapter. The infectious agents provisions apply only to hospitals and clinics.

**Subp. 6. Waste service employers.** Employers that provide a service of collecting, processing, or disposing of waste regulated under the federal Resource Conservation and Recovery Act are exempt from the hazardous substances and harmful physical agents training and information requirements of this chapter. These employers, even though they may be small businesses, must develop and implement a training program for their employees and have that program approved by the commissioner.

**Statutory Authority:** *MS s 182.655*

**History:** 8 SR 1949

### 5206.0400 HAZARDOUS SUBSTANCES.

**Subpart 1. In general.** The commissioner has determined that the list of hazardous substances in subpart 4 shall be covered by the provisions of this chapter. The hazardous substance list includes the majority of hazardous substances that will be encountered in Minnesota; it does not include all hazardous substances and will not always be current. Employers shall exercise reasonable diligence in evaluating their workplace for the presence of other recognized hazardous substances and assure that employees are provided with the rights stated in this chapter.

**Subp. 2. Exemptions.** Substances or mixtures within the categories in items A to I are exempt from coverage under this standard.

A. Products intended for personal consumption by employees in the workplace.

B. Consumer products packaged for distribution to, and used by, the general public, including any product used by an employer or the employer's employees in the same form, concentration, and manner as it is sold to consumers, and to the employer's knowledge, employee exposure is not significantly greater than the consumer exposure occurring during principal consumer use of the product.

C. Any article, including but not limited to an item of equipment or hardware, which contains a hazardous substance, if the substance is present in a solid form which does not create a health hazard as a result of being handled by the employee.

D. Any hazardous substance that is bound and not released under normal conditions or work or in a reasonably foreseeable occurrence resulting from workplace operations.

E. Products sold or used in retail food sale establishments and all other retail trade establishments, exclusive of processing and repair work areas.

F. Any waste material regulated pursuant to the federal Resource Conservation and Recovery Act, Public Law Number 94-580, but only with respect to any employer in a business which provides a service of collection, processing, or disposal of such waste.

G. Waste products labeled pursuant to the Resource Conservation and Recovery Act. If hazardous substances make up the waste product, the employer must assure that mixing of incompatible substances does not occur.

H. Any substance received by an employer in a sealed package and subsequently sold or transferred in that package, if the seal remains intact while the substance is in the employer's workplace.

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I. Any substance, mixture, or product if present in a physical state, volume, or mixture concentration for which there is no valid and substantial evidence that a significant risk to human health may occur from exposure.

Subp. 3. **Updating list.** The list of hazardous substances shall be updated by the commissioner at least every two years.

Subp. 4. **Codes for list of hazardous substances.** The list of hazardous substances in subpart 5 is coded as follows to designate the reference document which contains occupational exposure information concerning the particular substance:

"A" - American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limits Values for Chemical Substances and Physical Agents in the Work Environment with Intended Changes for 1983-4," available from ACGIH, 6500 Glenway Avenue, Building D-5, Cincinnati, Ohio 45211, (513) 661-7881.

"I" - American Industrial Hygiene Association (AIHA), "Workplace Environmental Exposure Level Guides" (1983), available from AIHA, 475 Wolf Ledges Parkway, Akron, Ohio 44311-1087, (216) 762-7294.

"N" - National Institute for Occupational Safety and Health (NIOSH), "Recommendations for Occupational Health Standards," available from NIOSH, Publications Dissemination Office, 4676 Columbia Parkway, Cincinnati, Ohio 45226, general information (513) 684-8235.

"O" - Occupational Safety and Health Administration (OSHA), Safety and Health Standards, Code of Federal Regulations, title 29, part 1910, subpart Z, "Toxic and Hazardous Substances, 1983." General information: Minnesota Department of Labor and Industry, Occupational Safety and Health Division, 444 Lafayette Road, St. Paul, Minnesota 55101, (612) 296-2116.

"S" - Occupational Safety and Health Administration proposed standards.

"\*" - An asterisk denotes substances which are regulated by OSHA as carcinogens, or which have been categorized by the ACGIH as either "human carcinogens" or "suspect of carcinogenic potential for man."

"Dust" - If the substance poses an airborne particulate exposure hazard, the substance is followed by the word, "dust."

"Fume" - Small solid particles formed by the condensation of vapors of solid materials.

"Gases" - Refers to displacement of air asphyxiation hazard.

"Skin" - If a potential for absorption from skin contact merits special consideration, the word, "skin" follows the substance name.

(number) - The number in parentheses following each substance is the American Chemical Society's Chemical Abstract Service (CAS) number for that substance.

α = Alpha

β = Beta

Subp. 5. **List of hazardous substances.** List of hazardous substances:

Abate (see Temephos)	
Acetaldehyde (75-07-0)	AO
Acetic acid (64-19-7)	AO
Acetic anhydride (108-24-7)	AO
Acetone (67-64-1)	AON
Acetone cyanohydrin (75-86-5)	N
Acetonitrile-skin (75-05-8)	ANO
*2-Acetylaminoflourene	O
Acetylene (74-86-2)	AN
Acetylene dichloride (see 1,2-Dichloroethylene)	
Acetylene tetrabromide (79-27-6)	AO
Acetylsalicylic acid (Aspirin) (50-78-2)	A

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Acrolein (107-02-8)	AO
Acrylamide-skin (79-06-1)	ANO
Acrylic acid (79-10-7)	A
*Acrylonitrile-skin (107-13-1)	ANO
Aldrin-skin (309-00-2)	AN
Allyl alcohol-skin (107-18-6)	AO
Allyl chloride (107-05-1)	ANO
Allylglycidyl ether (AGE)-skin (106-92-3)	ANO
Allyl propyl disulfide (2179-59-1)	AO
Aluminum pyro powders (7429-90-5)	A
Aluminum welding fumes (7429-90-5)	A
Aluminum, soluble salts (7429-90-5)	A
Aluminum, alkyls (7429-90-5)	A
Aminobiphenyl (see 4-Aminodiphenyl)	
*4-Aminodiphenyl-skin (92-67-1)	AO
2-Aminopyridine (504-29-0)	AO
*Amitrol (61-82-5)	A
Ammonia (7664-41-7)	ANOS
Ammonium chloride, fume (12125-02-9)	A
Ammonium sulfamate (7773-06-0)	O
Amosite (see Asbestos)	
n-Amyl acetate (628-63-7)	O
sec-Amyl acetate (626-38-0)	O
Aniline & homologues-skin (62-53-3)	O
Anisidine (o-p isomers)-skin (29191-52-4)	AO
Antimony & compounds, as Sb (7440-36-0)	ANO
*Antimony trioxide, handling & use, as Sb production (1309-64-4)	A
ANTU ( $\alpha$ -Naphthyl thiourea) (86-88-4)	AO
*Arsenic & soluble compounds as As, organic compounds as As (7440-38-2)	ANO
*Arsenic trioxide production (1327-53-3)	A
Arsine (7784-42-1)	AO
*Asbestos (1332-21-4)	AO
Asphalt (petroleum) fumes (8052-42-4)	AN
Atrazine (1912-24-9)	A
Azinphos-methyl-skin (86-50-0)	AO
Barium, soluble compounds, as Ba (7440-39-3)	AO
Baygon (Propoxur) (114-26-1)	A
Baytex (see Fenthion)	
Benomyl (17804-35-2)	A
*Benzene (71-43-2)	ANO
Benzenethiol (108-98-5)	N
*Benzidine-skin (92-87-5)	AO
p-Benzoquinone (see Quinone)	
Benzoyl peroxide (94-36-0)	ANO
*Benzo (a) pyrene (50-32-8)	A
Benzyl chloride (100-44-7)	ANO
*Beryllium (and compounds) (7440-41-7)	ANMO
Biphenyl (Diphenyl) (92-52-4)	AO
Bischloromethyl ether (BCME) (542-88-1)	AO
Bismuth telluride (1304-82-1)	A
Bismuth telluride; Se-doped	A
Borates, tetra, sodium salts (1303-96-4)	A
Boron oxide (1303-86-2)	AO
Boron tribromide (10294-33-4)	A
Boron trifluoride (7637-07-2)	ANO

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Bromacil (314-40-9)	A
Bromine (7726-95-6)	AO
Bromine pentafluoride (7789-30-2)	A
Bromochloromethane (see Chlorobromomethane)	
Bromoform-skin (75-25-2)	AO
Bromotrifluoromethane (see Trifluorobromomethane)	
*Butadiene (1,3-Butadiene) (106-99-0)	AO
Butane (106-97-8)	A
Butanethiol (see Butyl mercaptan)	
2-Butanone (see Methyl Ethyl Ketone (MEK))	
2-Butoxy ethanol-skin (111-76-2)	AO
n-Butyl acetate (123-86-4)	AO
sec-Butyl acetate (105-46-4)	AO
tert-Butyl acetate (540-88-5)	AO
n-Butyl acrylate (141-32-2)	A
n-Butyl alcohol-skin (71-36-3)	AO
sec-Butyl alcohol (78-92-2)	O
tert-Butyl alcohol (75-65-0)	O
Butylamine-skin (109-73-9)	AO
Butyl cellosolve (see 2-Butoxy ethanol)	
tert-Butyl chromate, as CrO <sub>3</sub> -skin (1189-85-1)	AO
n-Butyl glycidyl ether (BGE) (2426-08-6)	AO
n-Butyl lactate (138-22-7)	A
Butyl mercaptan (109-79-5)	ANO
o-sec-Butyl phenol-skin (89-72-5)	A
p-tert-Butyl toluene (98-51-1)	AO
n-Butyronitrile (109-74-0)	N
Cadmium (7440-43-9) & its compounds (as Cd)	N
Cadmium (7440-43-9), dust & salts (as Cd), fume	ANO
Cadmium oxide (1306-19-0), fume (as Cd)	ANO
*Cadmium oxide production (as Cd)	A
Calcium cyanamide (156-62-7)	A
Calcium hydroxide (1305-62-0)	A
Calcium oxide (1305-78-8)	AO
Camphor, synthetic (76-22-2)	AO
Caprolactam, dust & vapor (105-60-2)	A
Captafol-skin (2425-06-1)	A
Captan (133-06-2)	A
Carbaryl (Sevin <sup>®</sup> ) (63-25-2)	ANO
Carbofuran (Furadan) (1563-66-2)	A
Carbon black (1333-86-4)	ANO
Carbon dioxide (124-38-9)	ANO
Carbon disulfide-skin (75-15-0)	ANO
Carbon monoxide (630-08-0)	ANO
Carbon tetrabromide (558-13-4)	A
*Carbon tetrachloride-skin (56-23-5)	ANO
Carbonyl flouride (353-50-4)	A
Catechol (Pyrocatechol) (120-80-9)	A
Cellosolve acetate (see 2-Ethoxyethyl acetate)	
Cesium hydroxide (21351-79-1)	A
Chlordane-skin (57-74-9)	AO
Chlordecone (KEPONE) (143-50-0)	N
Chlorinated camphene (Toxaphene)-skin (8001-35-2)	AO
Chlorinated diphenyl oxide (55720-99-5)	AO
Chlorine (7782-50-5)	ANO
Chlorine dioxide (10049-04-4)	AO
Chlorine trifluoride (7790-91-2)	AO

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Chloroacetaldehyde (107-20-0)	AO
α-Chloroacetophenone (Phenacylchloride) (532-27-4)	AO
Chloroacetyl chloride (79-04-9)	A
Chlorobenzene (Monochlorobenzene) (108-90-7)	AO
o-Chlorobenzylidene malononitrile (OCBM)-skin (2698-41-1)	AO
Chlorobromomethane (74-97-5)	AO
2-Chloro-1,3-butadiene (see β-Chloroprene)	
Chlorodifluoromethane (75-45-6)	A
Chlorodiphenyl-skin (see PCB)	AO
42% Chlorine (53449-21-9)	
54% Chlorine (11097-69-1)	
1-Chloro-2,3-epoxypropane (see Epichlorohydrin)	
2-Chloroethanol (see Ethylene chlorohydrin)	
Chloroethylene (see Vinyl chloride)	
*Chloroform (67-66-3)	ANO
bis (2-Chloroisopropyl) ether	I
*bis-Chloromethyl ether (BCME) (542-88-1)	AO
*Chloromethyl methyl ether (see Methyl chloromethyl ether)	
1-Chloro-1-nitropropane (600-25-9)	AO
Chloropentafluoroethane (76-15-3)	A
Chloropicrin (Trichloronitromethane) (76-06-2)	AO
β-Chloroprene-skin (126-99-8)	ANO
o-Chlorostyrene (1331-28-8)	A
o-Chlorotoluene-skin (95-49-8)	A
2-Chloro-6-trichloromethyl pyridine (N-Serve)	A
Chloropyrifos-skin (2921-88-2)	A
Chromates (see Chromic acid)	
*Chromates of lead and zinc, as Cr	A
Chromic acid and Chromates	NO
*Chromite ore processing (Chromate), as Cr	A
Chromium metal (7440-47-3)	AO
Chromium (II) compounds, as Cr	A
Chromium (III) compounds, as Cr	A
*Chromium (VI) compounds, as Cr (water soluble)	A
Chromium (VI) compounds	AN
Chromium (VI) compounds, (certain water insoluble ones)	AN
Chromium, soluble chromic, chromous salts, as Cr	AO
Chromyl chloride (14977-61-8)	A
*Chrysene (218-01-9)	AN
Clopidol (2971-90-6)	A
Coal, dust	O
*Coal tar pitch volatiles, as benzene solubles (8007-45-2)	ANO
Cobalt (as Co metal), dust & fume (7440-48-4)	ANO
*Coke oven emissions	NO
Copper dust & mists, as Cu (7440-50-8)	AO
Copper fume (7440-50-8)	AO
Cotton dust, raw	ANO
Crag <sup>R</sup> herbicide (see Sodium-2,4-dichloro-pneoxyethyl sulfate)	
Cresol, all isomers-skin (1319-77-3)	ANO
Crotonaldehyde (123-73-9)	AO
Crufomate (299-86-5)	A
Cumene-skin (98-82-8)	AO
Cyanamide (420-04-2)	A
Cyanides, as Cn-skin (151-50-8; 143-33-9)	AO
Cyanogen (460-19-5)	A
Cyanogen chloride (506-77-4)	A



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Cyclohexane (110-82-7)	AO
Cyclohexanethiol (1569-69-3)	N
Cyclohexanol (108-93-0)	AO
Cyclohexanone (108-94-1)	ANO
Cyclohexene (110-83-8)	AO
Cyclohexylamine-skin (108-91-8)	A
Cyclonite-skin (121-82-4)	A
Cyclopentadiene (542-92-7)	AO
Cyclopentane (287-92-3)	A
Cyhexatin (13121-70-5)	A
2,4-D (2,4-Dichlorophenoxyacetic acid) (94-75-7)	AO
DDT (Dichlorodiphenyltrichloro ethane)-skin (50-29-3)	ANO
DDVP (see Dichlorvos)	
Decaborane-skin (17702-41-9)	AO
Decabromodiphenyloxide	I
Demeton-skin (8065-48-3)	AO
Diacetone alcohol (4-Hydroxy-4-methyl-2-pentanone) (123-42-2)	ANO
1,2-Diaminoethane (see Ethylenediamine)	
Diatomaceous earth, uncalcined, dust	A
Diazinon-skin (333-41-5)	A
Diazomethane (334-88-3)	AO
Diborane (19287-45-7)	AO
*DBCPC (1,2-Dibromochloropropane) (96-12-8)	NO
1,2-Dibromoethane (see Ethylene dibromide)	
Dibrom (Dimethyl-1,2-dibromo-2-dichloroethyl phosphate)	A
2-N-Dibutylaminoethanol-skin (102-81-8)	A
Dibutyl phosphate (107-66-4)	AO
Dibutyl phthalate (84-74-2)	AO
Dichloroacetylene (7572-29-4)	A
o-Dichlorobenzene (95-50-1)	AO
p-Dichlorobenzene (106-46-7)	AO
*3,3'-Dichlorobenzidine (and salts)-skin (91-94-11)	AO
Dichlorodifluoromethane (75-71-8)	AO
1,3-Dichloro-5,5-dimethyl hydantoin (118-52-5)	AO
1,1-Dichloroethane (75-34-3)	AO
1,2-Dichloroethane (see Ethylene dichloride)	
1,1-Dichloroethylene (see Vinylidene chloride)	
1,2-Dichloroethylene (540-59-0)	AO
Dichloroethyl ether-skin (111-44-4)	AO
Dichlorofluoromethane (75-43-4)	A
Dichloromethane (see Methylene chloride)	
Dichloromonofluoromethane	O
1,1-Dichloro-1-nitroethane (594-72-9)	AO
1,2-Dichloropropane (see Propylene dichloride)	
Dichloropropene-skin (542-75-6)	A
2,2-Dichloropropionic acid (75-99-0)	A
Dichlorotetrafluoroethane (Fluorocarbon 114) (76-14-2)	AO
Dichlorvos (DDVP)-skin (62-73-7)	AO
Dicrotophos-skin (141-66-2)	A
Dicyclohexylmethane-4,4'-diisocyanate (5124-30-1)	N
Dicyclopentadiene (77-73-6)	A
Dicyclopentadienyl iron (102-54-5)	A
Dieldrin-skin (60-57-1)	ANO
Diethanolamine (111-42-2)	A
Diethylamine (109-89-7)	AO
Diethylamino ethanol-skin (100-37-8)	AO

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Diethylene dioxide (see Dioxane)	
Diethylene triamine-skin (111-40-0)	A
Diethyl ether (see Ethyl ether)	
Diethyl ketone (96-22-0)	A
Diethyl phthalate (84-66-2)	A
Difluorodibromomethane (FREON 12B2) (75-61-6)	AO
Diglycidyl ether (DGE) (2238-07-5)	ANO
Dihydroxybenzene (see Hydroquinone)	
Diisobutyl ketone (108-83-8)	ANO
Diisobutylene	IN
Diisocyanates (not including those listed separately)	N
Diisopropylamine-skin (108-18-9)	NO
Dimethoxymethane (see Methylal)	
Dimethyl acetamide-skin (127-19-5)	AO
Dimethylamine (124-40-3)	AO
*4-Dimethylaminoazobenzene	O
Dimethylaminobenzene (see Xylidene)	
Dimethylaniline (N,N-Dimethylaniline)-skin (121-69-7)	AO
Dimethylbenzene (see Xylene)	
*Dimethyl carbamyl chloride (79-44-7)	A
Dimethyl-1,2-dibromo-2-dichloroethyl phosphate (See Dibrom <sup>R</sup> )	
Dimethyl ether	I
Dimethyl formamide-skin (68-12-2)	AO
2,6-Dimethyl-4-heptanone (see Diisobutyl ketone)	
*1,1-Dimethylhydrazine-skin (57-14-7)	ANO
Dimethyl phthalate (131-11-3)	AO
*Dimethyl sulfate-skin (77-78-1)	AO
Dimethyl terephthalate	I
Dinitolmide (148-01-6)	A
Dinitrobenzene, all isomers-skin (528-29-0)	AO
Dinitro-o-cresol (DNOC)-skin (534-52-1)	ANO
3,5-Dinitro-o-toluamide (Zoalene) (148-01-6)	A
Dinitrotoluene-skin (121-14-2)	AO
Dioxane (Diethylene dioxide)-skin (123-91-1)	ANO
Dioxathion (Delanov)-skin (78-34-2)	A
Diphenyl (see Biphenyl)	
Diphenylamine (122-39-4)	A
Diphenyl ether (see Phenyl ether)	
Diphenylmethane diisocyanate (see Methylene bisphenyl isocyanate (MDI))	
Dipropylene glycol methyl ether (34590-94-8)	AO
Dipropyl ketone (4-Heptanone) (123-19-3)	A
Diquat (85-00-7)	A
Di-sec-octyl phthalate (di(2-Ethylhexyl)phthalate) (117-81-7)	AO
Disulfiram (97-77-8)	A
Disulfoton (Disyston) (298-04-4)	A
2,6-Di-tert-butyl-p-cresol (128-37-0)	A
Diuron (330-54-1)	A
Divinyl benzene (108-57-6)	A
Dust, Inert or Nuisance (When toxic impurities are not present, e.g., quartz less than 1%)	A
Including:	
α-Alumina (AL <sub>2</sub> O <sub>3</sub> )	
Aluminum, metal & oxide	
Calcium carbonate	

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Calcium silicate	
Cellulose (paper fiber)	
Emery	
Glycerin Mist	
Graphite (synthetic)	
Gypsum	
Kaolin	
Limestone	
Magnesite	
Marble	
Mineral Wool Fiber	
Pentaerthritol	
Perlite	
Plaster of Paris	
Portland Cement	
Rouge	
Silicon	
Silicon Carbide	
Starch	
Sucrose	
Titanium Dioxide	
Vegetable oil mists (except castor, cashew nut, or similar irritant oils)	
Zinc Stearate	
Zinc Oxide Dust	
Dyfonate-skin (944-22-9)	A
Endosulfan (Thiodan)-skin (115-29-7)	A
Endrin-skin (72-20-8)	AO
Epichlorohydrin-skin (106-89-8)	NO
EPN-skin (2104-64-5)	AO
1,2-Epoxy propane (see Propylene oxide)	
2,3-Epoxy-1-propanol (see Glycidol)	
Ethanethiol (see Ethyl mercaptan)	
Ethanolamine (141-43-5)	A
Ethion-skin (563-12-2)	A
2-Ethoxyethanol-skin (110-80-5)	AO
2-Ethoxyethyl acetate-skin (111-15-9)	AO
Ethyl acetate (141-78-6)	AO
Ethyl acrylate-skin (140-88-5)	AO
Ethyl alcohol (Ethanol) (64-17-5)	AO
Ethylamine (75-04-7)	AO
Ethyl amyl ketone (5-Methyl-3-Heptanone) (41-85-5)	AO
Ethyl benzene (100-41-4)	AO
Ethyl bromide (74-96-4)	AO
Ethyl butyl ketone (3-Heptanone) (106-35-4)	AO
Ethyl chloride (75-00-3)	AO
Ethylene Chlorohydrin-skin (107-07-3)	AO
Ethylene diamine (107-15-3)	AO
*Ethylene dibromide-skin (106-93-4)	ANO
Ethylene dichloride (1,2-Dichloroethane) (107-06-2)	ANO
Ethylene glycol (107-21-1), particulate & vapor	A
Ethylene glycol dinitrate (EGDN)-skin (628-96-6)	ANO
Ethylene glycol methyl ether acetate-skin (110-49-6)	AO
*Ethyleneimine-skin (151-56-4)	AO
*Ethylene oxide (75-21-8)	ANOS
Ethyl ether (60-29-7)	AO
Ethylidene norbornene (16219-75-3)	A

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Ethyl mercaptan (75-08-1)	ANO
Ethyl methacrylate	
N-Ethyl morpholine-skin (100-74-3)	AO
Ethyl silicate (78-10-4)	AO
Fensulfothion (Dasanit) (115-90-2)	A
Fenthion (55-38-9)	A
Ferbam (14484-64-1)	AO
Ferrovandium (12604-58-9)	AO
Fibrous glass dust (see Glass)	
Fluoride, as F, as dust (16984-48-8)	ANO
Fluorine (7782-41-4)	AO
Fluorocarbon 11 (see Trichlorofluoromethane)	
Fluorocarbon 12 (see Dichlorodifluoromethane)	
Fluorocarbon 13b1 (see Trifluoromonobromomethane)	
Fluorocarbon 21 (see Dichlorofluoromethane)	
Fluorocarbon 22 (see Chlorodifluoromethane)	
Fluorocarbon 31 (see Chlorofluoromethane)	
Fluorocarbon 112 (see 1,1,1,2-Tetrachloro-2,2-difluoroethane)	
Fluorocarbon 113 (see Trichlorotrifluoroethane)	
Fluorocarbon 114 (see Dichlorotetrafluoroethane)	
Fluorocarbon 115 (see Chloropentafluoroethane)	
Fluorocarbon 124 (see Chlorotetrafluoroethane)	
Fluorocarbon 132b (see Dichlorodifluoroethane)	
Fluorocarbon 133a (see Chlorotrifluoroethane)	
Fluorocarbon 141b (see Dichlorofluoroethane)	
Fluorocarbon 142b (see Chlorodifluoroethane)	
Fluorocarbon 152a (see Difluoroethane)	
Fluorocarbon C-318 (see Octafluorocyclobutane)	
Fluorotrichloromethane (see Trichlorofluoromethane)	
Fonofos-skin (944-22-9)	AO
*Formaldehyde (50-00-0)	ANO
Formamide (75-12-7)	A
Formic acid (64-18-6)	AO
Furfural-skin (98-01-1)	A
Furfuryl alcohol-skin (98-00-0)	AN
Gases, Simple Asphyxiants	A
Including:	
Acetylene	
Argon	
Ethane	
Ethylene	
Helium	
Hydrogen	
Methane	
Neon	
Propane	
Propylene	
Gasoline (8006-61-9)	A
Germanium tetrahydride (7782-65-2)	A
Glass, fibrous or dust	N
Glutaraldehyde (111-30-8)	A
Glycidol (2,3-Epoxy-1-propanol) (556-52-5)	AO
Glycol ethers	
Glycol monoethyl ether (see 2-Ethoxyethanol)	
Glycolonitrile (107-16-4)	N
Graphite, natural, dust (7782-42-5)	AO

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Guthion (see Azinphos-methyl)	
Hafnium (7440-58-6)	AO
Halothane (151-67-7)	AN
Halowax (see Hexachloronaphthalene)	
Heptachlor-skin (76-44-8)	AO
Heptane (n-Heptane) (142-82-5)	ANO
3-Heptanone (see Ethyl butyl ketone)	
*Hexachlorobutadiene (76-68-3)	A
Hexachlorocyclopentadiene (77-47-4)	A
Hexachloroethane (67-72-1)	AO
Hexachloronaphthalene (Halowax 1014)-skin (1335-87-1)	AO
Hexadiene	I
Hexafluoroacetone (684-16-2)	A
*Hexamethyl phosphoramidate-skin (680-31-9)	A
Hexamethylene diisocyanate (822-06-0)	N
Hexane (n-Hexane) (110-54-3)	ANO
Hexane, other isomers (107-83-5; 107-83-2)	A
Hexanediol diacrylate	I
1-Hexanethiol (111-31-9)	N
2-Hexanone (Methyl n-butyl ketone) (591-78-6)	O
Hexone (Methyl isobutyl ketone) (108-10-1)	O
sec-Hexyl acetate (142-92-7)	AO
Hexylene glycol (107-41-5)	A
*Hydrazine-skin (302-01-2)	ANO
Hydrogenated terphenyls (92-94-4)	A
Hydrogen bromide (10035-10-6)	AO
Hydrogen chloride (7647-01-0)	AO
Hydrogen cyanide-skin (74-90-8)	AO
Hydrogen fluoride (7664-39-3), as F	ANO
Hydrogen peroxide (7722-84-1)	A
Hydrogen peroxide (90%) (7722-84-1)	O
Hydrogen selenide (7783-07-5)	AO
Hydrogen sulfide (7783-06-4)	ANO
Hydroquinone (123-31-9)	ANO
2-Hydroxypropyl acrylate-skin (999-61-1)	A
Indene (95-13-6)	A
Indium (95-13-6) & compounds, as In	A
Inert or Nuisance Dusts (see Dust)	
Iodine (7553-56-2)	AO
Iodoform (75-47-8)	A
Iron oxide fume (Fe <sub>2</sub> O <sub>3</sub> ) (1309-37-1), as Fe	AO
Iron pentacarbonyl (13463-40-6), as Fe	A
Iron salts, soluble, as Fe	A
Isoamyl acetate (123-92-2)	AO
Isoamyl alcohol (123-51-3)	AO
Isobutyl acetate (110-19-0)	AO
Isobutyl alcohol (78-83-1)	AO
Isobutyronitrile (78-82-0)	N
Isooctyl alcohol (26952-21-6)	A
Isophorone (78-59-1)	ANO
Isophorone diisocyanate-skin	AN
Isopropoxyethanol (109-59-1)	A
Isopropyl acetate (108-21-4)	AO
Isopropyl acetone (see Methyl isobutyl ketone)	
Isopropyl alcohol (67-63-0)	ANO
Isopropylamine (75-31-0)	A
N-Isopropylaniline-skin (643-28-7)	A

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Isopropyl ether (108-20-3)	AO
Isopropyl glycidyl ether (IGE) (4016-14-2)	ANO
Kepone (see Chlordecone)	
Ketene (463-51-4)	AO
Lead (7439-92-1), inorganic fumes & dusts, as Pb	ANO
Lead arsenate (10102-48-4), as Pb <sub>3</sub> (AsO <sub>4</sub> ) <sub>2</sub>	A
Lead chromate (Cr) (18454-12-1)	A
Lindane-skin (58-89-9)	AO
Lithium hydride (7580-67-8)	AO
L.P.G. (Liquefied Petroleum Gas)	AO
Magnesium oxide fume (1309-48-4)	AO
Malathion-skin (121-75-5)	ANO
Maleic anhydride (108-31-6)	AO
Malononitrile (109-77-3)	N
Manganese (7439-96-5)	O
Manganese & compounds, as Mn, dust & fume (7439-96-5)	A
Manganese cyclopentadienyltricarbonyl (12079-65-1)	
as Mn-skin	A
Manganese tetroxide	A
Mercaptoacetic acid (see Thioglycolic acid)	
Mercury, as Hg-skin (7439-97-6)	AN
Mesityl oxide (141-79-7)	ANO
Methacrylic acid (79-41-4)	A
Methanethiol (see Methyl mercaptan)	
Methomyl (Lannate)-skin (16752-77-5)	A
Methoxychlor (72-43-5)	AO
2-Methoxyethanol (Methyl cellosolve)-skin (109-86-4)	AO
2-Methoxyethyl acetate-skin (110-49-6)	A
4-Methoxyphenol (150-76-5)	A
Methyl acetate (79-20-9)	AO
Methyl acetylene (Propyne) (74-99-7)	AO
Methyl acetylene-propadiene mixture (MAPP)	AO
Methyl acrylate-skin (96-33-3)	AO
Methyl acrylonitrile-skin (126-98-7)	A
Methylal (Dimethoxy methane) (109-87-5)	AO
Methyl alcohol (Methanol)-skin (67-56-1)	ANO
Methyl amine (74-89-5)	AO
Methyl amyl alcohol (see Methyl isobutyl carbinol)-skin	
Methyl n-amyl ketone (2-Heptanone) (110-43-0)	ANO
N-Methyl aniline-skin (100-61-8)	A
Methyl bromide-skin (74-83-9)	AO
Methyl-n-butyl ketone (591-78-6)	ANO
Methyl cellosolve-skin	O
Methyl celosolve acetate (Ethylene glycol monomethyl ether acetate)-skin (110-49-6)	AO
Methyl chloride (74-87-3)	AO
Methyl chloroform (1,1-Trichloroethane) (71-55-6)	ANO
*Methyl chloromethyl ether (107-30-2)	AO
Methyl-2-cyano acrylate (137-05-3)	A
Methyl cyclohexane (108-87-2)	AO
Methyl cyclohexanol (25639-42-3)	AO
o-Methyl cyclohexanone-skin (583-60-8)	AO
Methyl cyclopentadienyl manganese tricarbonyl, as Mn-Skin (12108-13-3)	A
Methyl demeton-skin (8022-00-2)	A
Methylene bisphenyl isocyanate (MDI) (101-68-8)	ANO
Methylene chloride (75-09-2)	ANO

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*4,4'-Methylene bis(2-Chloroaniline) (MOCA)-skin (101-14-4)	AN
Methylene bis (4-Cyclohexylisocyanate) (5124-30-1)	A
4,4-Methylenedianiline-skin (101-77-9)	A
Methyl ethyl ketone (MEK) (78-93-3)	ANO
Methyl ethyl ketone peroxide (1338-23-4)	AO
Methyl formate (107-31-3)	AO
5-Methyl-3-heptanone (see Ethyl amyl ketone)	
*Methyl hydrazine-skin (60-34-4)	ANO
*Methyl iodide-skin (74-88-4)	AO
Methyl isoamyl ketone (110-12-3)	A
Methyl isobutyl carbinol-skin (105-30-6)	AO
Methyl isobutyl ketone (Hexone) (108-10-1)	ANO
Methyl isocyanate-skin (624-83-9)	AO
Methyl isopropyl ketone (563-80-4)	A
Methyl mercaptan (74-93-1)	ANO
Methyl methacrylate (80-62-6)	AO
Methyl parathion-skin (298-00-0)	AN
Methyl n-propyl ketone (107-87-9)	ANO
Methyl silicate (681-84-5)	A
$\alpha$ -Methyl styrene (98-83-9)	AO
Mevinphos (PHOSDRIN <sup>®</sup> )-skin (7786-34-7)	A
Mica, dust	AO
Molybdenum (7439-98-7), as Mo, soluble/insoluble compounds	AO
Monocrotophos (Azodrin) (6923-22-4)	A
Monomethyl aniline-skin (100-61-8)	AO
Monomethyl hydrazine-skin	
Morpholine-skin (110-91-8)	AO
Naled (300-76-5)	A
Naphtha (Coal Tar) (MX8030-31-7)	O
Naphtha (Varnish Makers & Painters or VM & P Naphtha)	A
Naphtha (Rubber Solvent)	A
Naphthalene (91-20-3)	AO
Naphthalene diisocyanate (25551-28-4)	N
* $\alpha$ -Naphthylamine (91-59-8)	O
* $\beta$ -Naphthylamine (91-59-8)	A
$\alpha$ -Naphthylthiourea (see ANTU)	
Nickel carbonyl (13463-39-3), as Ni	ANO
Nickel (7440-02-0), metal, and compounds, as Ni	ANO
*Nickel sulfide roasting, fume, & dust, as Ni	A
Nicotine-skin (54-11-5)	AO
Nitrapyrin (1929-82-4)	A
Nitric acid (7697-37-2)	ANO
Nitric oxide (10102-43-9)	AO
p-Nitroaniline-skin (100-01-6)	AO
*4-Nitrobiphenyl (see *4-Nitrodiphenyl)	
Nitrobenzene-skin	AO
p-Nitrochlorobenzene-skin (100-00-5)	AO
Nitrochloromethane (see Chloropicrin)	
*4-Nitrodiphenyl (92-93-3)	AO
Nitroethane (79-24-3)	AO
Nitrogen dioxide (10102-44-0)	ANO
Nitrogen trifluoride (7783-54-2)	AO
Nitroglycerin (NG)-skin (55-63-0)	ANO
Nitromethane (75-52-5)	AO
1-Nitropropane (108-03-2)	AO
*2-Nitropropane (79-46-9)	AO
*N-Nitrosodimethylamine (Dimethylnitrosoamine)-skin	

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(62-75-9)	AO
Nitrotoluene-skin (99-08-1)	AO
Nitrous oxide (10024-97-2)	N
Nonane (111-84-2)	A
Nuisance Dust (see Dust)	
Octachloronaphthalene-skin (2234-13-1)	AO
Octane (111-65-9)	ANO
Oil mist, mineral	AO
Organic arsenic compounds, as As	O
Organo (alkyl) mercury	O
Organotin compounds	NO
Osmium tetroxide (20816-12-0), as Os	AO
Oxalic acid (144-62-7)	AO
Oxygen difluoride (7783-41-7)	AO
Ozone (10028-15-6)	AO
PCB (see Chlorodiphenyl)	
Paraffin wax fume (8002-74-2)	A
Paraquat-skin (1910-42-5)	AO
Parathion-skin (56-38-2)	ANO
Particulate polycyclic aromatic hydrocarbons (PPAH) (see Coal tar pitch volatiles)	
Pentaborane (19624-22-7)	AO
Pentachloronaphthalene (1321-64-8)	AO
Pentachlorophenol-skin (87-86-5)	AO
Pentaerythritol triacrylate	I
Pentane (109-66-0)	ANO
2-Pentanone (see Methyl propyl ketone)	
Perchloroethylene (Tetrachloroethylene)-skin (127-18-4)	ANO
Perchloromethyl mercaptan (594-42-3)	AO
Perchloryl fluoride (7616-94-6)	AO
Petroleum Distillates (Naphtha)	O
Phenol-skin (108-95-2)	ANO
Phenothiazine-skin (92-84-2)	A
*N-Phenyl-beta-naphthylamine (135-88-6)	A
p-Phenylene diamine-skin (106-50-3)	AO
Phenyl ether (101-84-8)	AO
Phenyl ether-biphenyl mixture, vapor	O
Phenylethylene (see Styrene, monomer)	
Phenyl glycidyl ether (PGE) (122-60-1)	NO
*Phenylhydrazine-skin (100-63-0)	ANO
Phenyl mercaptan (108-98-5)	A
Phenylphosphine (638-21-1)	A
Phorate (Thimet)-skin (298-02-2)	A
Phosdrin (Mevinphos)-skin (7786-34-7)	AO
Phosgene (Carbonyl chloride) (75-44-5)	NO
Phosphamidon (13171-21-6)	O
Phosphine (3803-51-2)	AO
Phosphoric acid (7664-38-2)	AO
Phosphorus (yellow) (7723-14-0)	AO
Phosphorus oxychloride (10026-13-8)	A
Phosphorus pentachloride (10026-13-8)	AO
Phosphorus pentasulfide (1314-80-3)	AO
Phosphorus trichloride (7719-12-2)	AO
Phthalic anhydride (85-44-9)	AO
m-Phthalodinitrile (626-17-5)	A
Picloram (Tordon) (1918-02-1)	A
Picric acid (2,4,6-Trinitrophenol)-skin (88-89-1)	AO



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Pindone (2-Pivaloyl-a,3-indandione) (83-26-1)	A
Piperazine dihydrochloride (142-64-3)	A
Piperidine	I
Pival <sup>R</sup> (Pindone) (83-26-1)	AO
Platinum (Metal) (7440-06-4)	A
Platinum (7440-06-04), soluble salts, as Pt	AO
Polychlorobiphenyls (PCBs) (see Chlorodiphenyls)	
Polyethylene glycol, particulate	I
Polypropylene glycol, particulate	I
Polytetrafluoroethylene (TEFLON) decomposition products	A
Potassium bromate	AI
Potassium hydroxide (1310-58-3)	A
Propane (74-98-6)	AO
*Propane sultone (1120-71-4)	A
1-Propanethiol (see Propyl mercaptan)	
Propargyl alcohol-skin (107-19-7)	A
*β-Propiolactone (57-57-8)	AO
Propionic acid (79-09-4)	A
Propoxur (see BAYGON <sup>R</sup> )	
n-Propyl acetate (109-60-4)	AO
n-Propyl alcohol-skin (71-23-8)	AO
n-Propyl mercaptan (107-03-9)	NO
n-Propyl nitrate (627-13-4)	AO
Propylene dichloride (1,2-Dichloro propane) (78-87-5)	AO
Propylene glycol dinitrate (PGDN)-skin (6423-43-4)	A
Propylene glycol monomethyl ether (107-98-2)	A
*Propyleneimine-skin (75-55-8)	AO
Propylene oxide (75-56-9)	AO
Propyne (74-99-7)	AO
Pseudocumene (see 1,2,4-Trimethyl benzene)	
Pyrethrum (8003-34-7)	AO
Pyridine (110-86-1)	AO
Pyrocatechol (Catechol) (120-80-9)	A
Quinone (106-51-4)	AO
RDX (Cyclonite)-skin (121-82-4)	A
Resorcinol (108-46-3)	A
Rhodium (7440-16-6)	AO
Ronnel (299-84-3)	AO
Rosin core solder pyrolysis products, as Formaldehyde	A
Rotenone (Commercial) (83-79-4)	AO
Rubber solvent (Naphtha)	AO
Selenium compounds (7782-49-2), as Se	AO
Selenium hexafluoride (7783-79-1), as Se	AO
Sesone (136-78-7)	A
Sevin (63-25-2)	AO
Silane (see Silicon tetrahydride)	
Silica (SiO <sub>2</sub> ) (7631-86-9)	ANO
Silicon tetrahydride (7803-62-5)	A
Silver (7440-22-4), metal & soluble compounds, as Ag	AO
Soapstone, dust	AO
Sodium azide (26628-22-8)	A
Sodium bisulfite (7631-90-5)	A
Sodium 2,4-dichlorophenoxyethyl sulfate (CRAG) (136-78-7)	AO
Sodium fluoroacetate (1080)-skin (62-74-8)	AO
Sodium hydroxide (1310-73-2)	ANO
Sodium Metabisulfite (7681-57-4)	A
Stibine (7803-52-3)	AO

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Stoddard solvent (8052-41-3)	ANO
Strychnine (57-24-9)	AO
Styrene, monomer (100-42-5)	AO
Subtilisins (1395-21-7) (Proteolytic enzymes as 100% pure crystalline enzyme)	A
Succinonitrile (110-61-2)	N
Sulfotep-skin (3689-24-5)	A
Sulfur dioxide (7446-09-5)	ANO
Sulfur hexafluoride (2551-62-4)	AO
Sulfuric acid (7664-93-9)	ANO
Sulfur monochloride (10025-67-9)	AO
Sulfur pentafluoride (Dimer) (5714-22-7)	AO
Sulfur tetrafluoride (7783-60-0)	A
Sulfuryl fluoride (2699-79-8)	AO
Systox-skin (8065-48-3)	AO
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) (93-76-5)	AO
Talc (Nonasbestiform, resp. & fibrous) (14807-96-6)	AO
Tantalum (7440-25-7)	AO
TEDP (Tetraethyldithionopyrophosphate)-skin (13494-80-9)	AO
Teflon decomposition products	A
Tellurium & compounds (13494-80-9), as Te	AO
Tellurium hexafluoride (7783-80-4), as Te	AO
Temphos (3383-96-8)	A
TEPP-skin (107-49-3)	AO
Terphenyls (92-94-4)	A
1,1,1,2-Tetrachloro-2,2-difluoroethane (Fluorocarbon 112a) (76-11-9)	AO
1,1,2,2-Tetrachloro-1,2-difluoroethane (Fluorocarbon 112) (76-12-0)	AO
1,1,2,2-Tetrachloroethane-skin (79-34-5)	ANO
Tetrachloroethylene (see Perchloroethylene)	
Tetrachloromethane (see Carbon tetrachloride)	
Tetrachloronaphthalene-skin (1335-88-2)	AO
Tetraethyl lead, as Pb-skin (78-00-2)	AO
Tetraethylene glycol diacrylate	I
Tetrahydrofuran (109-99-9)	AO
Tetramethyl lead, as Pb-skin (75-74-1)	AO
Tetramethyl succinonitrile-skin (3333-52-6)	ANO
Tetranitromethane (509-14-8)	AO
Tetrasodium pyrophosphate (7722-88-5)	A
Tetryl (2,4,6-Trinitrophenylmethylnitramine)-skin (479-45-8)	AO
Thallium (7440-28-0)	AO
4,4'-Thiobis (6-tert butyl-m-cresol) (96-69-5)	A
Thioglycolic acid (68-11-1)	A
Thiols (N-alkyl mercaptans)	N
Thiram (Tetramethyl thiuram disulfide) (137-26-8)	AO
Tin (Metal) (7440-31-5)	AO
Tin oxide, dust	A
*o-Tolidine (119-93-7)	AN
Toluene (Toluol) (108-88-3)	ANO
Toluene-2,4-diisocyanate (TDI) (584-84-9)	ANO
p-Toluenesulfonyl chloride (98-59-9)	I
*o-Toluidine-skin (95-53-4)	ANO
Toxaphene (see Chlorinated camphene)	
Tremolite (see Talc, fibrous)	
Tributyl phosphate (126-73-8)	AO

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Trichloroacetic acid (76-03-9)	A
1,2,4-Trichlorobenzene (120-82-1)	A
1,1,1-Trichloroethane (see Methyl chloroform)	
1,1,2-Trichloroethane-skin (79-00-5)	AO
Trichloroethylene (79-01-6)	ANO
Trichlorofluoromethane (Fluorocarbon 11) (75-69-4)	A
Trichloromethane (see Chloroform)	
Trichloronaphthalene (Halowax) (1321-65-9)	AO
Trichloronitromethane (see Chloropicrin)	
1,2,3,-Trichloropropane (96-18-4)	AO
1,1,2-Trichloro-1,2,2-trifluoroethane (Fluorocarbon 113) (76-13-1)	AO
Tricyclohexyltin hydroxide (Cyhexatin) (13121-70-5)	A
Triethylamine (121-44-8)	AO
Triethylene glycol diacrylate	I
Trifluorobromomethane (Fluorocarbon 13B1) (75-63-8)	AO
Trifluoromonobromomethane (Fluorocarbon 13B1, see Trifluorobromomethane)	
Trimellitic anhydride (552-30-7)	A
Trimethyl amine (75-50-3)	AI
Trimethyl benzene (25551-13-7)	A
Trimethyl phosphite (121-45-9)	A
Trimethylol propane triacrylate	I
Trimethylol propane trimethacrylate	I
2,4,6-Trinitrophenol (see Picric acid)	
2,4,6-Trinitrophenylmethylnitramine (see Tetryl)	
2,4,6-Trinitrotoluene (TNT)-skin (118-96-7)	AO
Triorthocresyl phosphate (TOCP) (78-30-8)	AO
Triphenyl amine (603-34-9)	A
Triphenyl phosphate (115-86-6)	AO
Trisodium phosphate (7601-54-9)	I
Tungsten & compounds (7440-33-7), as W	AN
Turpentine (8006-64-2)	AO
Uranium, natural compounds, as U, soluble & insoluble (7440-61-1)	AO
Valeraldehyde (110-62-3)	A
Vanadium, dust & fume (1314-62-1)	ANO
Vinyl acetate (108-05-4)	AN
Vinyl benzene (see Styrene)	
*Vinyl bromide (593-60-2)	A
*Vinyl chloride (75-01-4)	ANO
Vinyl cyanide (see Acrylonitrile)	
*Vinyl cyclohexene dioxide (106-87-6)	A
Vinyl halides	N
Vinylidene chloride (1,1-Dichloroethylene) (75-35-4)	A
Vinyl toluene (25013-15-4)	AO
VM&P naphtha (8030-30-6)	A
Warfarin (81-81-2)	AO
Welding fumes	A
Wood dust	A
certain hardwoods (as beech & oak)	
softwood	
Xylene (o-m-p-isomers) (1330-20-7)	ANO
m-Xylene $\alpha,\alpha'$ -diamine (MXDA, meta-meta-xylenediamine) (1477-55-0)	A
Xylidene-skin (1300-73-8)	AO
Zinc chloride fume (7646-85-7)	AO

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Zinc chromate (13530-65-9), as Cr  
Zinc oxide fume (1314-13-2)  
Zirconium compounds (7440-67-2), as Zr

A  
ANO  
AO

**Statutory Authority:** *MS s 182.655*

**History:** 8 SR 1949

## 5206.0500 HARMFUL PHYSICAL AGENTS.

Subpart 1. **In general.** The commissioner has determined that the list of harmful physical agents in subpart 3 shall be covered by the provisions of this chapter. The harmful physical agents list includes the majority of physical agents that may be encountered in Minnesota. Where there is a reasonably foreseeable potential for exposure to one or more of these physical agents at a level which may be expected to approximate or exceed the permissible exposure limit or the applicable action level the employer must provide training to employees as required in part 5206.0700.

Subp. 2. **Updating list.** The list of harmful physical agents shall be updated by the commissioner at least every two years.

Subp. 3. **Harmful physical agents list.**

A. Heat.

B. Noise.

C. Ionizing radiation. Any employer who possesses or uses by-product material, source material, or special nuclear material, as defined in the Atomic Energy Act of 1954 as amended, under a license issued by the Nuclear Regulatory Commission shall be deemed to be in compliance with the harmful physical agent provisions of the Employee Right-to-Know Act of 1983.

D. Nonionizing radiation.

**Statutory Authority:** *MS s 182.655*

**History:** 8 SR 1949

## 5206.0600 INFECTIOUS AGENTS; HOSPITALS AND CLINICS.

Subpart 1. **In general.** The commissioner has determined that the list of infectious agents in subparts 4 to 6 shall be covered by the provisions of this chapter. This list includes the majority of known communicable infectious agents which may be encountered in Minnesota. The list does not include all infectious agents nor will the list always be current. Employers must exercise reasonable diligence in evaluating their workplace for the presence of other recognized infectious agents and assure that employees are provided with the rights stated in this chapter. Training must be provided to employees on only those infectious agents to which employees may be routinely exposed; training need not be provided on all infectious agents on the list.

Subp. 2. **Updating list.** The list of infectious agents shall be updated by the commissioner at least every two years.

Subp. 3. **Codes for lists of infectious agents.** The lists of infectious agents in subparts 4 to 6 are coded as follows to designate a reference document which contains information concerning the particular agent:

"A" - Guidelines for Isolation Precautions in Hospitals, Centers for Disease Control, 1983.

"B" - Diagnostic Microbiology, Bailey and Scott's, Sixth Edition, 1982.

"C" - Control of Communicable Disease in Man, Abram S. Benenson, Editor; American Public Health Association, 1981.

"D" - Biosafety in Microbiological and Biomedical Laboratories, Centers for Disease Control, March 1983 draft.

"M" - Reportable Disease List, Minnesota Department of Health, Revised 1983.

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“O” - Classification of Micro-organisms on the Basis of Hazard, Appendix B-1, Centers for Disease Control and National Institute of Health, 1982.

**Subp. 4. Bacterial agents. Bacterial agents:**

Bacillus anthracis	ABCDM
Bordetella	ABCM
Brucella	ABCDM
Campylobacter	ABCDM
Chlamydia	C
Corynebacterium diptheriae	ABCDM
enteropathogenic Escherichia coli	ACM
Francisella tularensis	BCD
Haemophilus influenzae	ABCM
Klebsiella pneumoniae	ABCM
Legionella	ACD
Leptospira interrogans	ABCDM
Listeria monocytogenes	C
Moraxella	C
Mycobacteria	ABCDM
Mycoplasma pneumoniae	ABC
Neisseria gonorrhoeae, N. meningitidis	ABCDM
Pasteurella (see Yersinia)	ACM
Pseudomonas	ABCD
Salmonella	ABCDM
Shigella	ACDM
Staphylococcus aureus	ABCM
Streptococcus pneumoniae, S. pyogenes, S. group A	ABCM
Treponema	BC
Vibrio Cholerae, V. fetus, V. parahemolyticus	ABCM
Yersinia	ACDM

**Subp. 5. Viral agents. Viral agents:**

Adenoviruses	AC
AIDS agent	
Arboviruses	C
California virus	
Western equine encephalitis virus	
St. Louis encephalitis virus	
Eastern equine encephalitis virus	
Arenaviruses	ACDM
Lassa Fever virus	
Coronavirus	C
Coxsackie A and B viruses	ABC
Creutzfeldt-Jakob virus	ACD
Dengue virus	CD
Ebola fever virus	AC
Echoviruses	ABC
Hemorrhagic fever agents	C
Hepatitis-types A,B, non-A/non-B, unspecified	ACDM
Herpes Viruses	ACD
Simplex virus	
Varicella-zoster virus	
Cytomegalovirus	
Herpes virus simiae	
Epstein-Barr virus	
Influenza viruses	AC
Kuru	ACD
Lymphocytic choriomeningitis virus	CD
Marburg virus	AC

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Measles virus	ACM
Mumps virus	ACM
Norwalk agent	C
Parainfluenze virus	C
Polioviruses	ABCDM
Poxviruses	CD
Rabies virus	ACDM
Respiratory syncytial virus	AC
Rhinoviruses	C
Rotaviruses	C
Rubella virus	ACM
Variola (Smallpox)	ACM
Yellow fever virus	ACM

### Subp. 6. Fungal agents. Fungal agents:\*

Blastomyces dermatitidis	ACD
Coccidioides immitis	ABCD
Histoplasma capsulatum	ABCD
Mucoraceae	C
Paracoccidioides brasiliensis	C
Sporothrix schenckii	ACD

\*Laboratory risk only; no risk to patient-care personnel.

**Statutory Authority:** *MS s 182.655*

**History:** 8 SR 1949

## 5206.0700 TRAINING.

Subpart 1. **In general.** The requirements in items A to G apply to training programs provided to employees concerning hazardous substances, harmful physical agents, and infectious agents.

A. Training shall be made available by, and at the cost of, the employer.

B. Records of training provided under the requirements of this chapter must be maintained by the employer, retained for five years, and made available, upon request, for review by employees and representatives of the Occupational Safety and Health Division.

C. Information and training programs may relate to specific exposure hazards; the common hazards of a broad class of hazardous substances, harmful physical agents, and infectious agents; or to the hazards of a complete production operation, whichever is more effective. Specific information on individual hazardous substances or mixtures, harmful physical agents, and infectious agents must be available in writing for employees' use.

D. Access to a display device shall constitute compliance with the requirement for a written copy of required information which shall be readily accessible in the area or areas in which the hazardous substance, harmful physical agent, or infectious agent is used or handled, provided that a hard copy printout is available to the employee requesting it within 24 hours excluding nonwork-days.

E. Frequency of training:

(1) Training must be provided to an employee prior to initial assignment to a workplace where the employee may be routinely exposed to a hazardous substance, harmful physical agent, or infectious agent.

(2) Additional training must be provided to an employee prior to the time the employee may be routinely exposed to any additional hazardous substances, harmful physical agents, or infectious agents.

(3) All employees who have been routinely exposed to a hazardous substance, harmful physical agent, or infectious agent prior to January 1, 1984, and who will continue to be routinely exposed to those substances or agents, must

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be provided with training with respect to those substances and agents by July 1, 1984.

(4) Training updates must be repeated at intervals of not greater than one year. Training updates may be brief summaries of information included in previous training sessions.

F. The commissioner may, upon request of an employer or an employer's representative, certify an existing training program as complying with this chapter.

G. The employer shall maintain current information for training or information requests by employees.

**Subp. 2. Training program for hazardous substances.** Training for employees who may be routinely exposed to hazardous substances shall be provided in a manner which can be reasonably understood by the employees and must include the following:

A. the name or names of the substance including any generic or chemical name, trade name, and commonly used name;

B. the level, if any and if known, at which exposure to the substance has been restricted according to standards adopted by the commissioner, or, if no standard has been adopted, according to guidelines established by competent professional groups which have conducted research to determine the hazardous properties of potentially hazardous substances;

C. the known acute and chronic effects of exposure at hazardous levels, including routes of entry;

D. the known symptoms of the effects;

E. any potential for flammability, explosion, or reactivity of the substance;

F. appropriate emergency treatment;

G. the known proper conditions for use of and exposure to the substance;

H. procedures for cleanup of leaks and spills;

I. the name, phone number, and address of a manufacturer of the hazardous substance; and

J. a written copy of all of the above information which shall be readily accessible in the area or areas in which the hazardous substance is used or handled.

**Subp. 3. Training program for harmful physical agents.** The training program for employees who may be routinely exposed to harmful physical agents at a level which may be expected to approximate or exceed the permissible exposure limit or applicable action levels shall be provided in a manner which can be reasonably understood by the employees and shall include the information required by the standard for that physical agent as determined by the commissioner including the following:

A. the name or names of the physical agent including any commonly used synonym;

B. the level, if any and if known, at which exposure to the physical agent has been restricted according to standards adopted by the commissioner, or, if no standard has been adopted, according to guidelines established by competent professional groups which have conducted research to determine the hazardous properties of potentially harmful physical agents;

C. the known acute and chronic effects of exposure at hazardous levels;

D. the known symptoms of the effects;

E. appropriate emergency treatment;

F. the known proper conditions for use of and/or exposure to the physical agent;

G. the name, phone number, and address, if appropriate, of a manufacturer of the harmful physical agent; and

H. a written copy of all of the above information which shall be readily accessible in the area or areas in which the harmful physical agent is present and where the employees may be exposed to the agent through use, handling, or otherwise.

**Subp. 4. Training program for infectious agents.** Training for employees who are routinely exposed to infectious agents shall be provided in a manner which can be reasonably understood by the employees and must include the following:

A. Chain of infection, or infectious disease process, including:

- (1) agents;
- (2) reservoirs;
- (3) modes of escape from reservoir;
- (4) modes of transmission;
- (5) modes of entry into host; and
- (6) host susceptibility.

B. Proper techniques for the employee to avoid self-contamination consistent with good patient care. Specific agents may be grouped to facilitate training.

C. Hazards to special at-risk employee groups as information is available.

D. Recommended immunization practices.

E. How to gain access to further information and reference materials that must be made available in the workplace including the location, contents, and availability of pertinent materials that explain symptoms and effects of each infectious agent.

**Statutory Authority:** *MS s 182.655*

**History:** *8 SR 1949*

#### 5206.0800 AVAILABILITY OF INFORMATION.

**Subpart 1. Data sheets.** A written document containing the information required in the training programs described in part 5206.0700, subparts 2 and 3 shall be available for each hazardous substance or harmful physical agent to which employees who are not technically qualified individuals are routinely exposed.

**Subp. 2. Data sheet for product mixture.** A material safety data sheet may be prepared on an entire product mixture if hazard test information exists on the mixture itself or adequate information exists to form a valid judgment of the hazardous properties of the mixture itself and the manufacturer indicates that the conclusions drawn are from some source other than direct testing on the mixture, information on the mixture will be as effective in protecting employee health as information on the ingredients, and the hazardous substances in the mixture are identified together with the information on the mixture.

**Subp. 3. Hazardous concentrations.** All components that are hazardous substances and are present in quantities above one percent by weight in a mixture must be listed on the material safety data sheet or equivalent data sheet. Whenever valid evidence indicates that a substance or components of a mixture are hazardous at concentrations less than one percent by weight, these ingredients must be listed and the required hazard information provided on manufacturer's labels and data sheets. Substances and mixtures that are exempt from this requirement are described in part 5206.0400, subpart 2.

**Subp. 4. Impurity concentrations.** Impurities known to be present and in quantities below one percent by weight are exempt from the listing requirements



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on labels and data sheets unless known to the manufacturer to contribute substantially to the hazard of the mixture.

**Subp. 5. Form.** Provision of a properly completed federal OSHA form 20, "Material Safety Data Sheet," shall be prima facie proof of compliance with the information requirements of a data sheet or the requirements under Minnesota Statutes, section 182.653, subdivisions 4b, 4c, and 4e.

**Subp. 6. Providing data sheet.** Any person subject to the provisions of this chapter shall be released from the obligation to provide a specific employer who purchases a hazardous substance with a material safety data sheet if that person has previously provided the specific purchaser with the most recent version of the material safety data sheet.

**Subp. 7. Data sheet in research laboratory.** In a research laboratory, a material safety data sheet must be available for each hazardous substance used to produce a new mixture until the manufacturer is able to determine the data sheet information for the new mixture.

**Subp. 8. Alternative data sheet.** In lieu of a written document as required by this part, access to a display device shall constitute compliance if the information is readily accessible in the area or areas in which the hazardous substance is used or handled and a printout of the information is available to the employee requesting it within 24 hours, excluding nonworkdays.

**Statutory Authority:** *MS s 182.655*

**History:** *8 SR 1949*

### 5206.0900 CRITERIA FOR TECHNICALLY QUALIFIED INDIVIDUALS.

**Subpart 1. Hazardous substances.** In a research, medical research, medical diagnostic or medical educational laboratory, health care facility, clinic associated with a laboratory or health care facility, or in a pharmacy registered and licensed under Minnesota Statutes, chapter 151, it shall be the responsibility of the employer to determine which employees are to be classified as technically qualified individuals. The minimum criteria to be used as guidelines include:

A. a baccalaureate degree, or higher, with a major in a technical field from an accredited institution or a technician with at least two years' actual experience working with hazardous substances in a research, medical research, medical diagnostic or medical educational laboratory, health care facility, clinic associated with a laboratory or health care facility, or in a pharmacy registered and licensed under Minnesota Statutes, chapter 151;

B. the ability to understand the meaning of the entries on a data sheet;  
and

C. access to reference materials on the hazardous substances handled in the employee's workplace.

**Subp. 2. Harmful physical agents.** In a research, medical research, medical diagnostic or medical educational laboratory, health care facility, clinic associated with a laboratory or health care facility, or in a pharmacy registered and licensed under Minnesota Statutes, chapter 151, it shall be the responsibility of the employer to determine which employees are to be classified as technically qualified individuals. The minimum criteria to be used as guidelines include:

A. a baccalaureate degree, or higher, with a major in a technical field from an accredited institution or a technician with at least two years' actual experience working with harmful physical agents in a research, medical research, medical diagnostic or medical educational laboratory, health care facility, clinic associated with a laboratory or health care facility, or in a pharmacy registered and licensed under Minnesota Statutes, chapter 151;

B. the ability to understand the meaning of the entries on a data sheet;  
and

C. access to reference materials on the harmful physical agents pertinent to the employee's workplace.

Subp. 3. **Infectious agents.** To qualify as a technically qualified individual with respect to infectious agents in a hospital or clinic, an employee shall meet the following criteria:

A. possession of a mandatory Minnesota state license as chiropractor, dentist, optometrist, osteopath, pharmacist, physician, podiatrist, veterinarian, or registered nurse (licensed practical nurses are excluded); or possession of a baccalaureate degree, or higher, from an accredited institution in a medical or allied health profession;

B. with the exception of dentists, osteopaths, and physicians, at least one year of actual work experience after January 1, 1984, in a hospital or clinic; and

C. access to reference texts or resource materials on the communicable infectious agents to which the employee may be routinely exposed in the workplace.

Subp. 4. **Registration of qualifications.** Employees in a research, medical research, medical diagnostic or medical educational laboratory, health care facility, clinic associated with a laboratory or health care facility, or in a pharmacy registered and licensed under Minnesota Statutes, chapter 151, who believe they have qualifications (experience, education, and specific training with respect to hazardous substances, harmful physical agents, or infectious agents) equivalent to those described in subpart 1, item A; subpart 2, item A; or subpart 3, item A, may register those qualifications with the commissioner and request technically qualified individual status. If granted, the registration shall be permanent. If denied, the commissioner shall indicate the reason for denial in writing. An employee may reapply after six months.

**Statutory Authority:** *MS s 182.655*

**History:** 8 SR 1949

## LABELING

### 5206.1000 LABELING HAZARDOUS SUBSTANCES.

Subpart 1. **Original shipping containers.** Original shipping containers containing a hazardous substance shall be labeled. The label shall provide substantially the same precautionary information as required under the training and information requirements in Minnesota Statutes, section 182.653, subdivisions 4b, 4c, and 4e; that is, to list the generic names of the components which contribute substantially to the hazards of the substance or mixture and provide precautionary data sheet information on those components. A label may be a coded reference to an appropriate and accessible data sheet containing information required under Minnesota Statutes, section 182.653, subdivisions 4b, 4c, and 4e. When appropriate, a current data sheet may be affixed to or posted in accessible close proximity to a container containing a hazardous substance or a harmful physical agent in satisfaction of these labeling requirements.

Subp. 2. **Compliance.** Labeling in compliance with the Federal Insecticide, Fungicide and Rodenticide Act or the Federal Hazardous Substances Act shall meet the requirements of the Employee Right-to-Know Act of 1983.

Subp. 3. **Drugs.** Drugs used in a health care facility, and labeled in accordance with the requirements of the Federal Food and Drug Administration, shall be deemed to be in compliance with the Employee Right-to-Know Act of 1983.

Subp. 4. **Pipelines.** These container labeling requirements do not apply to pipelines in refineries or interstate or intrastate pipelines whose employees have been trained in accordance with the Employee Right-to-Know Act of 1983.

Subp. 5. **Bulk transport.** Hazardous substances transported in bulk shall be labeled in accordance with applicable labeling requirements of the American

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National Standards Institute (ANSI) or the federal Department of Transportation Standard for Transportation of Hazardous Substances in Code of Federal Regulations, title 49, part 172, subparts D, E, and F.

Subp. 6. **Process containers.** Process containers shall be either labeled or coded with the names of the hazardous substances they contain. Immediate-use containers need not be labeled.

**Statutory Authority:** *MS s 182.655*

**History:** *8 SR 1949*

### **5206.1100 LABELING HARMFUL PHYSICAL AGENTS; LABEL CONTENT.**

Equipment or a work area that specifically generates harmful physical agents at a level which may be expected to approximate or exceed the permissible exposure limit or applicable action level shall be labeled. The label shall include:

A. the name or names of the physical agent including any commonly used synonym;

B. the level, if any and if known, at which exposure to the physical agent has been restricted according to standards adopted by the commissioner, or, if no standard has been adopted, according to guidelines established by competent professional groups which have conducted research to determine the hazardous properties of potentially harmful physical agents;

C. the known acute and chronic effects of exposure at hazardous levels;

D. the known symptoms of the effects;

E. appropriate emergency treatment;

F. the known proper conditions for use of and/or exposure to the physical agent; and

G. the name, phone number, and address, if appropriate, of a manufacturer of the harmful physical agent.

**Statutory Authority:** *MS s 182.655*

**History:** *8 SR 1949*

### **5206.1200 CERTIFICATION OF EXISTING LABELING PROGRAM.**

The commissioner may, upon the request of an employer or manufacturer, certify an existing labeling program as complying with the Employee Right-to-Know Act of 1983.

**Statutory Authority:** *MS s 182.655*

**History:** *8 SR 1949*

## **FARMING OPERATIONS TRAINING PLAN**

### **5206.1300 PURPOSE.**

The standards in parts 5206.1300 to 5206.1900 implement provisions of the Employee Right-to-Know Act of 1983, Laws of Minnesota 1983, chapter 316, which require the commissioner of the Department of Labor and Industry to develop and implement a training program for farming operations. These standards, which apply to farming operations only, require each employer who is engaged in a farming operation and employs more than ten employees or who is engaged in a farming operation and maintains a temporary labor camp and employs any of its residents to provide training and information to employees who are routinely exposed to hazardous substances or harmful physical agents.

**Statutory Authority:** *MS s 182.655*

**History:** *10 SR 623*

**5206.1400 SCOPE.**

Farming operations that employ more than ten employees or that operate a temporary labor camp and employ any of its residents must comply with all requirements of this chapter at the time the employer has more than ten employees or at the time the camp is maintained. Persons who only provide housing facilities for seasonal or temporary migrant agricultural workers employed by another employer are exempt from the requirements of parts 5206.1300 to 5206.1900. Farming operations that employ ten or fewer employees and do not maintain a temporary labor camp are exempt from the provisions of parts 5206.1300 to 5206.1900 except that label information must be furnished to employees or their representatives upon request as provided in Minnesota Statutes, section 182.654.

**Statutory Authority:** *MS s 182.655*

**History:** *10 SR 623*

**5206.1500 DEFINITIONS.**

**Subpart 1. Scope.** The terms used in parts 5206.1300 to 5206.1900 have the meanings given them in this part.

**Subp. 2. Data sheet.** "Data sheet" means a document such as a material safety data sheet (OSHA Form 20), operation standard, or placard which contains information required by Minnesota Statutes, section 182.653, subdivisions 4b and 4e regarding the physical, chemical, and hazardous properties of a substance or mixture and is used by an employer to communicate to an employee the information required under Minnesota Statutes, section 182.653, subdivisions 4b and 4e.

**Subp. 3. Employee.** "Employee" means any person suffered or permitted to work by an employer including any person acting directly or indirectly in the interest of or as a representative of an employer. It includes any child employed in accordance with Minnesota Statutes, chapter 181A.

**Subp. 4. Handler.** "Handler" means any person who handles, mixes, or applies hazardous substances.

**Subp. 5. Harmful physical agent.** "Harmful physical agent" means a physical agent determined by the commissioner as part of the standard for that agent to present a significant risk to worker health or safety or imminent danger of death or serious physical harm to an employee.

**Subp. 6. Hazardous substance.** "Hazardous substance" means a chemical or substance, or mixture of chemicals or substances, which:

A. is regulated by the Federal Occupational Safety and Health Administration under Code of Federal Regulations, title 29, part 1910, subpart Z;

B. is a pesticide used in agricultural operations registered with the United States Environmental Protection Agency (EPA) under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), section 3;

C. is either toxic or highly toxic; an irritant; corrosive; a strong oxidizer; a strong sensitizer; combustible; either flammable or extremely flammable; dangerously reactive; pyrophoric; pressure-generating; a compressed gas; a carcinogen; a teratogen; a mutagen; a reproductive toxic agent; or that otherwise, according to generally accepted documented medical or scientific evidence, may cause substantial acute or chronic personal injury or illness during or as a direct result of any customary or reasonably foreseeable accidental or intentional exposure to the chemical or substance; or

D. is determined by the commissioner as part of the standard for the chemical or substance or mixture of chemicals and substances to present a significant risk to worker health and safety or imminent danger of death or serious physical harm to an employee as a result of foreseeable use, handling, accidental spill, exposure, or contamination.

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Subp. 7. **Non-handler.** "Non-handler" means any person who does not handle, use, or apply a hazardous substance but is exposed to hazardous substances such as in field work.

Subp. 8. **Incidental farm worker.** "Incidental farm worker" means any person who is not a handler of hazardous substances and is employed for not more than five days.

Subp. 9. **Routinely exposed.** "Routinely exposed" means a reasonable potential for exposure exists during the normal course of assigned work. It includes the exposure of an employee to a hazardous substance when assigned to work in a field where a hazardous substance has been applied to that field within the last 30 days. It does not include a simple walk through of an area where a hazardous substance is present.

Subp. 10. **Temporary labor camp.** "Temporary labor camp" means any facility arranged, paid for, or maintained by an employer in which that employer's seasonal or temporary agricultural workers are required to live as a condition of employment. A "temporary labor camp" may consist of one or more buildings or structures, tents, or vehicles. It also includes a barracks-type camp, in which sleeping quarters are arranged on the dormitory plan, and a family-type camp that provides individual dwelling quarters for single family units.

**Statutory Authority:** *MS s 182.655*

**History:** *10 SR 623*

## 5206.1600 HAZARDOUS SUBSTANCES AND HARMFUL PHYSICAL AGENTS.

Subpart 1. **Hazardous substances list.** The commissioner has determined that part 5206.0400, subpart 2 "Exemptions" and subpart 5 "List of hazardous substances" shall be incorporated by reference and shall be covered by the provisions of parts 5206.1300 to 5206.1900. The list of hazardous substances includes the majority of hazardous substances, including pesticides, that will be encountered in Minnesota. It does not include all hazardous substances and will not always be current. Employers shall exercise reasonable diligence in evaluating their farming operation with respect to other recognized hazardous substances and assure that employees are provided with the training required in part 5206.1700.

Subp. 2. **Harmful physical agents covered by this chapter.** The commissioner has determined that indoor heat shall be covered by the provisions of this chapter governing harmful physical agents. Where there is a reasonably foreseeable potential for exposure to heat in an indoor work environment where the temperature may be expected to reach or exceed the permissible exposure limit, the employer must provide training to employees as required in part 5206.1700.

**Statutory Authority:** *MS s 182.655*

**History:** *10 SR 623*

## 5206.1700 TRAINING.

Subpart 1. **General.** The requirements in items A to G apply to training programs provided to employees concerning hazardous substances and harmful physical agents.

A. Training shall be made available by, and at the cost of, the employer.

B. Records of training provided under the requirements of this chapter must be maintained by the employer, retained for five years, and made available, upon request, for review by employees or their representatives and by the commissioner or his or her authorized representative.

C. Information and training programs may relate to specific exposure hazards; the common hazards of a group of hazardous substances; or to the hazards of a complete production operation, whichever is more effective. Specific

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information on individual hazardous substances or mixtures and harmful physical agents must be available in writing for employees' use.

D. Once training has been completed, an employer may request the employee to sign a statement that the employee has been trained as required by parts 5206.1300 to 5206.1900.

E. Frequency of training.

(1) Training must be provided to an employee prior to initial assignment to a worksite where the employee may be routinely exposed to a hazardous substance or harmful physical agent.

(2) Additional training must be provided to a non-handler of hazardous substances prior to the time the employee may be routinely exposed to a hazardous substance or harmful physical agent with properties not covered in the generic training program. Additional training must be provided to a handler of hazardous substances prior to the time the employee may be routinely exposed to a new hazardous substance or harmful physical agent.

(3) Training must be provided at intervals of not greater than one year. Maintenance of a private applicator's certification or commercial applicator's license fulfills the annual training requirement.

(4) Employees performing the same or similar job assignments for more than one employer during the current growing season need only be trained once. The current employer must produce verification of the training, in a timely manner, upon request of the commissioner or an authorized representative of the commissioner.

F. The commissioner may, upon request of an employer or an employer's representative, certify a training program as complying with this chapter.

G. The employer shall maintain current information for training or information requests by employees.

**Subp. 2. Training program for hazardous substances.** Training for employees who may be routinely exposed to hazardous substances shall be provided in a manner which can be reasonably understood by the employees. For employees who do not understand English, training must be provided in a language understood by the employee.

A. Training program for handlers of hazardous substances.

(1) The oral training program for handlers of hazardous substances must include the following:

(a) the name or names of the substance including any generic or chemical name, trade name, and commonly used name;

(b) the level, if any and if known, at which exposure to the substance has been restricted according to standards adopted by the commissioner, or, if no standard has been adopted, according to guidelines established by competent professional groups which have conducted research to determine the hazardous properties of potentially hazardous substances;

(c) the known acute and chronic effects of exposure at hazardous levels (including routes of entry into the body);

(d) the known symptoms of the effects;

(e) any potential for flammability, explosion, or reactivity of the substance;

(f) appropriate emergency treatment;

(g) the known proper conditions for safe use of and exposure to the substance;

(h) procedures for cleanup of leaks and spills;

(i) the name, phone number, and address of a manufacturer of the hazardous substance; if the name and phone number of a manufacturer is not

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available, the phone number of a local poison control center or the Chemical Transportation Emergency Center (CHEMTREC) must be provided.

(2) A written copy of the information required in subitem (1) shall be readily accessible in the area or areas in which the hazardous substance is used or handled.

(3) In lieu of the oral training program required in subitem (1), employees who handle or use hazardous substances may obtain and hold a valid private applicator's certification from the Minnesota Department of Agriculture by completing the training program available through the county extension agent or may fulfill licensing requirements and secure a commercial applicator's license as provided for in Minnesota Statutes, section 18A.26, subdivision 2. Maintenance of a private applicator's certification or commercial applicator's license fulfills the annual training requirement of subpart 1, item E, subitem (3).

B. The oral training program for non-handlers of hazardous substances must include the following:

(1) Proper conditions of exposure:

(a) where label information restricts re-entry after application to other than when sprays have dried or dusts have settled, employees must be provided with the name of the substance, the time of application, and the re-entry time; and

(b) where label information does not restrict re-entry or restricts entry until sprays have dried or dusts have settled, employees must be instructed not to re-enter a field treated with the pesticide until the spray has dried or the dust has settled since application.

(2) Routes of entry into the body:

(a) methods of preventing entry;

(b) emergency procedures to be followed in case of accidental exposure; and

(c) first aid and other applicable nonemergency procedures.

(3) Symptoms of exposure:

(a) possible allergies, symptoms, or sensitivities that may occur; and

(b) hazards to special at-risk groups such as children and pregnant women as information is available.

(4) Procedures to follow if symptoms appear.

(5) A written copy of the information in item B must be available for employee use. For employees who do not read English, a written notice in a language understood by the employee must be provided advising employees of the name and address of an agency that will translate the written information for them.

(6) Provision of information for medical treatment:

(a) Information required for medical treatment as described in unit (b) must be provided immediately upon request to an employee, or the employee's representative, who reports symptoms of exposure. If symptoms appear, the employee or employee representative shall request information for medical treatment from the employer.

(b) The employer shall give the employee or employee representative the name of the substance, the date it was applied, the rate at which it was applied, and either the material safety data sheet or the label for the substance applied.

(c) Employees who are unfamiliar with the community or who do not speak English must be provided information in a language understood by the employee concerning the appropriate agency to contact for assistance and medical treatment.

C. Hazardous substance training for incidental farm workers may be fulfilled by providing incidental farm workers with written information in a language understood by the employee. The written statement shall include the information required in item B, subitems (1) to (5). The written information shall be provided to incidental farm workers prior to assignment to work in a field where a hazardous substance has been applied.

D. The training program developed or approved by the Department of Labor and Industry meets the requirements of this chapter.

**Subp. 3. Training program for harmful physical agents.** The training program for employees who may be routinely exposed to heat in an indoor work environment where the temperature may be expected to reach or exceed the permissible exposure limit shall be provided in a manner which can be reasonably understood by the employees. For employees who do not understand English, training must be provided in a language understood by the employees.

A. Training on heat must include the following:

- (1) the known proper conditions for exposure and recommended protective measures;
- (2) the known acute and chronic effects of exposure at hazardous levels;
- (3) the known symptoms of the effects;
- (4) appropriate emergency treatment; and
- (5) the effects of heat to special at-risk groups such as persons with heart disease and high blood pressure.

B. A written copy of the information in item A must be available for employees' use. For employees who do not read English, a written notice in a language understood by the employee must be provided advising employees of the name and address of an agency that will translate the written information for them.

C. In lieu of an oral training program, written documentation of the information required in item A may be provided to employees. For employees who do not read English, the written documentation must be in a language understood by the employee.

**Statutory Authority:** *MS s 182.655*

**History:** *10 SR 623*

#### **5206.1800 AVAILABILITY OF INFORMATION.**

**Subpart 1. Data sheets.** A written document containing the information required in the training programs described in part 5206.1700, subparts 2 and 3, shall be available for each hazardous substance or harmful physical agent to which employees are routinely exposed. Written information for hazardous substances must include the information required in part 5206.1700, subpart 2, item A, subitem (1), units (a), (c), (d), (f), and (g). Written information for heat must include the information required in part 5206.1700, subpart 3, item A.

**Subp. 2. OSHA Form 20.** Provision of a properly completed federal OSHA Form 20, "Material Safety Data Sheet," shall be prima facie proof of compliance with the information requirements of a data sheet or the requirements under Minnesota Statutes, section 182.653, subdivisions 4b, 4c, and 4e.

**Subp. 3. Translation of data sheet information.** For employees who do not read English, a written notice in a language understood by the employee must be included with the material safety data sheet indicating the name and address of an agency that will translate the information for the employee.

**Subp. 4. Data sheets not available.** If a material safety data sheet is not available from the manufacturer, label information must be provided to employees. The employer shall maintain a record of notices concerning the unavailability of data sheets.



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**Statutory Authority:** *MS s 182.655*

**History:** *10 SR 623*

### **5206.1900 LABELING.**

Employers engaged in a farming operation must comply with the labeling requirements for hazardous substances and harmful physical agents found in parts 5206.1000 and 5206.1100. The registered Environmental Protection Agency label meets the requirements of this part. Label information must be provided to employees or their representatives within 24 hours of the request.

**Statutory Authority:** *MS s 182.655*

**History:** *10 SR 623*

### **5206.2000 EFFECTIVE DATE.**

Minnesota Rules, parts 5206.1300 to 5206.1900 are effective March 1, 1986.

**Statutory Authority:** *MS s 182.655*

**History:** *10 SR 623*