

Commonwealth of Pennsylvania  
**Pennsylvania Code**

**Title 34. Labor and Industry**  
Department of Labor and Industry  
Chapter 301—323. Worker and Community Right-to-Know



**PART XIII. WORKER AND COMMUNITY  
RIGHT-TO-KNOW ACT**

Chap.		Sec.
301.	JURISDICTION, DEFINITIONS, EXEMPTIONS AND ADMINISTRATIVE MATTERS .....	301.1
303.	PREPARATION OF HAZARDOUS SUBSTANCE AND ENVIRONMENTAL HAZARD SURVEY FORMS .....	303.1
305.	MAINTENANCE AND DISCLOSURE OF SURVEY FORMS AND LISTS .....	305.1
307.	MATERIAL SAFETY DATA SHEET (MSDS) .....	307.1
309.	LABELING OF SUBSTANCES .....	309.1
311.	POSTING OF NOTICES AND OTHER INFORMATION .....	311.1
313.	EMPLOYER EDUCATIONAL AND TRAINING PROGRAM .....	313.1
315.	HEALTH AND EXPOSURE RECORDS .....	315.1
317.	TRADE SECRETS .....	317.1
319.	PROTECTION OF EMPLOYEES .....	319.1
321.	ENFORCEMENT PROCEDURES AND PENALTIES .....	321.1
323.	HAZARDOUS SUBSTANCE LIST .....	323.1

**Authority**

The provisions of this Part XIII issued under section 17 of the act of October 5, 1984 (P. L. 734, No. 159) (35 P. S. § 7317).

**CHAPTER 301. JURISDICTION, DEFINITIONS, EXEMPTIONS  
AND ADMINISTRATIVE MATTERS**

Sec.	
301.1.	Purpose and scope.
301.2.	Definitions.
301.3.	Jurisdiction/exemptions.
301.4.	Effective dates.
301.5.	Construction of regulations.
301.6.	Retention of materials.
301.7.	Risk to public health.
301.8.	Computation of time.

**Source**

The provisions of this Chapter 301 adopted August 1, 1986, effective August 2, 1986, 16 Pa.B. 2909, unless otherwise noted.

301-1

(145) No. Dec. 86



**§ 301.1. Purpose and scope.**

This chapter implements the jurisdictional and other requirements under sections 18 and 19 of the act (35 P. S. §§ 7318 and 7319). In addition, this chapter sets forth the effective dates of this part under section 22 of the act (35 P. S. § 7322).

**§ 301.2. Definitions.**

The following words and terms when used in this part, have the following meanings, unless the context clearly indicates otherwise:

*Act*—The Worker and Community Right-to-Know Act (35 P. S. §§ 7301—7320).

*Article*—A manufactured item which is formed to a specific shape or design during manufacture, which has end use functions dependent in whole or in part upon its shape or design during end use and which does not release, or otherwise result in exposure to, a hazardous chemical under normal conditions of use.

*Chemical*—An element, substance, chemical compound or a mixture of elements, substances or compounds. The term does not include an article, a food, drug or cosmetic as defined in the Federal Food, Drug and Cosmetic Act (21 U.S.C.A. § 321). The term does not include cosmetics, tobacco or products which are primarily intended for sale on the retail market to the general public and are sealed in the packages to be used therewith.

*Chemical Abstracts Service number*—The unique identification number assigned by the Chemical Abstracts Service to chemicals.

*Chemical identification sheet (CIS)*—A written document, prepared under the act, which contains, in the case of a hazardous mixture, the identity by chemical name, common name and Chemical Abstracts Service number; special hazardous substances comprising 0.01% or more of the mixture and hazardous substances comprising 1.0% or more of the mixture; and other substances comprising 3.0% more of the mixture.

*Chemical name*—The scientific designation of a chemical under the nomenclature system developed by the International Union of Pure and Applied Chemistry or the Chemical Abstracts Service rules of nomenclature.

*Common name*—A designation or identification other than a chemical name or trade name, by which a substance is generally known, such as a nonsystematic scientific name, which clearly identifies a single chemical or mixture and which is unique to that specific chemical or mixture.

*Consumer product*—A consumer product shall be defined in accordance with the Consumer Product Safety Act (15 U.S.C.A. §§ 2051—2083) and Federal Hazardous Substances Act (15 U.S.C.A. §§ 1261—1276) when subject to a consumer product safety standard or labeling requirement of those acts or regulations issued under those acts by the Consumer Product Safety Commission.

*Container*—A receptacle used to hold a liquid, solid or gaseous substance including, but not limited to, bottles, barrels, boxes, cans, cylinders, drums, cartons, vessels, vats and stationary tanks. The term does not include receptacles into which substances are transferred by the employe from labeled containers and which are intended only for the immediate use by the employe who performs the transfer, or receptacles which are primarily designed to be sold on the retail market for use by the general public.

*Department*—The Department of Labor and Industry of the Commonwealth.

*Director*—The Director of the Worker and Community Right-to-Know program designated by the Secretary or the Director's designee.

*Employee*—A person currently working for an employer, except domestic or casual laborers employed at the employer's place of residence. A former employe is considered an employe, except that the former employe's rights are subject to a request made by the former employe and received by the employer.

*Employee representative*—An individual or organization authorized by an employe to exercise the right to request information under the act. The term includes a recognized or certified collective bargaining agent for an employe without regard to individual employe authorization.

*Employer*—An individual, partnership, corporation or association doing business in this Commonwealth. The term includes the Commonwealth, its political subdivisions—including school districts—and an officer, board, commission, agency, authority or other instrumentality thereof.

*Environmental hazard*—A substance, emission or discharge determined by the Department to be a hazardous substance and which, because of its particular or extreme properties, poses a danger if released into the environment.

*Exposure*—A situation arising from a workplace operation where an employe may ingest, inhale, absorb through the skin or eyes or otherwise come into contact with a chemical or mixture.

*Hazardous mixture*—A mixture that contains one or more hazardous substances, in a concentration of 1.0% or greater in the mixture or a mixture that contains one or more special hazardous substances or environmental hazards in concentrations of 0.01% or greater in the mixture. The term includes a new mixture resulting from the combination of a special hazardous mixture and one or more chemicals or mixtures.

*Hazardous substance*—A chemical or mixture defined under section 3 of the act (35 P. S. § 7303). The term includes hazardous mixture. The term does not include substances naturally existing and not created as a result of, or in connection with, a manufacturing process, such as animal manures and coal.

*Hazardous substance fact sheet (HSFS)*—A written document prepared by the Department for the purpose of transmitting information about a hazardous substance to employers, employees or members of the general public.

*Hazard warning*—Words, pictures, symbols or a combination of these appearing on a label which conveys information regarding actions or cautions to be taken with regard to the associated hazardous substance.

*Health professional*—A physician, nurse, industrial hygienist, toxicologist or epidemiologist providing medical, occupational health or environmental health services.

*Importer*—The first business within the customs territory of the United States which handles chemicals produced in other countries and intended for sale and distribution to purchasers within the United States.

*Label*—A sign, emblem, sticker or marker affixed to or stenciled into a container listing the information required under section 6 of the act (35 P. S. § 7306) and Chapter 309 (relating to labeling and substances).

*MSDS*—Material Safety Data Sheet.

*Manufacturer*—An individual, partnership, corporation, association or other person who provides, extracts, produces, uses or otherwise makes chemicals for sale or distribution having a Standard Industrial Classification as designated in the *Standard Industrial Classification Manual* prepared by the Federal Office of Management and Budget within major groups 20 through 39, inclusive.

*Material Safety Data Sheet (MSDS)*—A written document prepared by a manufacturer, supplier or importer in conformity with section 4 of the act (35 P. S. § 7304) for the purpose of transmitting information concerning a chemical.

*Mixture*—A combination of chemicals not involving a chemical reaction.

*NIOSH Registry of Toxic Effects of Chemical Substances*—The online data base of the National Institute for Occupational Safety and Health Registry of Toxic Effects of Chemical Substances.

*OSHA*—The Federal Occupational Safety and Health Administration.

*Research and development laboratory*—A specially designated area used primarily for research, development, teaching or testing activity, and not primarily involved in the production of goods for commercial sale, in which chemicals are used by or under the direct supervision of a technically qualified person.

*Sealed package*—A portable container into which the manufacturer, importer or supplier has placed chemicals, and which is sealed by the manufacturer, importer or supplier for transport to another location, and which is intended to remain sealed until reaching its final destination. The term includes containers used to transport hazardous wastes under the Resource Conservation and Recovery Act of 1976 (42 U.S.C.A. §§ 6901—6986) or the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (26 U.S.C.A. §§ 4611—4682) and (42 U.S.C.A. §§ 6911, 6911e and 9601—9657).

*Secretary*—The Secretary of the Department.

*Special hazardous substance*—A hazardous substance so designated by the Department because its particular toxicity, tumorigenicity, mutagenicity, reproductive toxicity, flammability, explosiveness, corrosivity or reactivity poses a special hazard to health and safety.

*Supplier*—An individual, partnership, corporation, association or other person inside or outside of this Commonwealth, who manufactures, supplies, imports or distributes a chemical for sale, distribution or use within this Commonwealth.

*Technically qualified person*—A person who because of education, training or experience understands the risk associated with a hazardous substance or mixture containing a hazardous substance being handled by an employe under his supervision or guidance.

*Trade name*—A designation or identification such as a code name or number, or a brand name, used by an employer or supplier to identify a chemical other than by its chemical or common name.

*Trade secret*—A formula, plan, pattern, process, production data, information or compilation of information, including chemical or common name, which is known only to an employer and a limited

number of other individuals, and which is used in the fabrication and production or development of a product, process or service and which gives the employer possessing it a competitive advantage over businesses who do not possess it, or the secrecy of which is certified by an appropriate official of the Federal Government as necessary for national defense purposes.

*Workplace*—A building or work area or contiguous group of buildings or work areas at one geographical location composing a plant site in this Commonwealth used by the employer on a permanent or temporary basis to conduct business.

*Work area*—A room, section of a room or defined space within a workplace where workers are based for the regular performance of their duties.

#### Cross References

This section cited in 34 Pa. Code § 301.3 (relating to jurisdiction/exemptions).

### § 301.3. Jurisdiction/exemptions.

(a) *Information about hazardous substances required.* Employers and chemical suppliers doing business in this Commonwealth shall provide information about the identity and hazards of hazardous substances used in the workplace, except as provided in this chapter.

(b) *Exemptions.*

(1) Manufacturers as defined in § 301.2 (relating to definitions) and private sector employers regulated by OSHA's Hazard Communication Standard at 29 CFR 1910.1200 (relating to hazard communication) with respect to the communication of information to their employees about hazardous chemicals found in their workplace are exempt from the following:

Act	Regulations	Item
Section 3 (35 P. S. § 7303)	§§ 305.2(b), 305.3(b) (relating to maintenance and disclosure of Hazardous Substance Survey Forms; and maintenance and disclosure of Environmental Hazard Survey Forms)	Providing Hazardous Substance Survey Forms and Environmental Hazard Survey Forms to Employees
Section 4 (35 P. S. § 7304)	Chapter 307 (relating to Material Safety Data Sheet (MSDS))	Providing MSDSs to employees

Section 7(a)(1) (35 P. S. § 7307(a)(1))	Chapter 311 (relating to posting notices and other information)	Posting information in the workplace
Section 6 (35 P. S. § 7306)	Chapter 309 (relating to labeling of substances)	Labeling containers and pipelines in the workplace
Section 8 (35 P. S. § 7308)	Chapter 313 (relating to employer educational and training program)	Training employees

(2) An article is exempt from the act and this part under section 18(a)(1) of the act (35 P. S. § 7318(a)(1)).

(3) A product intended for personal consumption by employees in the workplace is exempt from the act and this part under section 18(a)(2) of the act (35 P. S. § 7318(a)(2)).

(4) A consumer product that is packaged in a container which is primarily designed for distribution to, and use by, the general public is exempt from the act under section 18(a)(3) of the act (35 P. S. § 7318(a)(3)).

(5) A product primarily intended for sale on the retail market to the general public and sealed in a package to be used therein is exempt from the act under section 2 of the act (35 P. S. § 7302).

(6) Foods, drugs and cosmetics as defined in the Federal Food, Drug and Cosmetic Act (21 U.S.C.A. § 321); 21 CFR Part 1 (relating to general regulations for the enforcement of the Federal Food, Drug and Cosmetic Act and the Fair Packaging and Labeling Act); section 18(a)(4) of the act (35 P. S. § 7318(a)(4)) and other cosmetics, under the definition of chemical in section 2 of the act (35 P. S. § 7302) are exempt.

(7) Tobacco, as defined in section 2 of the act (35 P. S. § 7302) and under the Federal Cigarette Labeling and Advertising Act (15 U.S.C.A. §§ 1331—1341) is exempt.

(c) *Special applications.*

(1) *Research and development laboratories.*

(i) A research and development laboratory is not required to do the following:

(A) Complete a Hazardous Substance Survey Form under section 3 of the act (35 P. S. § 7303) and § 303.1 (relating to Hazardous Substance Survey Forms).

(B) Complete an Environmental Substance Survey Form under section 3 of the act (35 P. S. § 7303) and § 303.2 (relating to Environmental Hazard Survey Forms).

(C) Conduct onsite testing under section 3 of the act (35 P. S. § 7303) and § 323.6 (relating to onsite testing of environmental hazards).

(D) Prepare MSDS under section 4 of the act (35 P. S. § 7304) and Chapter 307 (relating to Material Safety Data Sheet (MSDS)).

(E) Disclose new information regarding a hazardous substance under section 5(b) of the act (35 P. S. § 7305(b)) and § 307.13 (relating to new information).

(F) Post lists of hazardous substances and special hazardous substances found in the workplace, and environmental hazards emitted or discharged therefrom under section 7(a)(1) of the act (35 P. S. § 7307(a)(1)) and Chapter 311.

(G) Label containers and pipelines under section 6 of the act (35 P. S. § 7306) and Chapter 309.

(H) Provide public access to information under section 5(g) of the act (35 P. S. § 7305(g)) and § 305.6 (relating to public access).

(I) Develop new MSDSs for new or experimental chemicals created in the laboratory under section 18(b) of the act (35 P. S. § 7318(b)) and § 307.8 (relating to responsibility for preparing MSDSs).

(ii) A research and development laboratory shall make available MSDSs for chemicals otherwise acquired from manufacturers, suppliers and importers under section 18(b) of the act (35 P. S. § 7318(b)).

(2) *Sealed packages.*

(i) A sealed package handled by an employer which stores, warehouses or transports sealed packages and which is not the manufacturer, supplier or importer of the chemical contained in the sealed package is not required to comply with subparagraph (ii) with respect to the sealed package and the chemicals it contains if:

(A) The package remains sealed while in the employer's possession and control. A sealed package may be opened to examine the contents for emergency or safety reasons and by Federal authorities.

(B) The employer transfers possession and control of the sealed package to another person within 20 days of the employer's receipt.



(C) An additional 10 day grace period is permitted for unusual circumstances. Persistent use of the 10 day extension may be deemed a violation of this part by the Department.

(ii) If the conditions in subparagraph (i) are met, the following exemptions apply:

(A) The contents of the packages need not be considered when completing a Hazardous Substance Survey Form under section 3(e) of the act (35 P. S. § 7303(e)) and § 303.1.

(B) The contents of the packages need not be considered when completing an Environmental Hazard Survey Form under section 3(g) of the act (35 P. S. § 7303(g)) and § 303.2.

(C) The contents of the packages need not be considered when completing an MSDS under sections 4(b) and 5(e) of the act (35 P. S. §§ 7304(b) and 7305(e)) and Chapter 307.

(D) Labeling the sealed package under section 6 of the act (35 P. S. § 7306) and Chapter 309 is not required.

(E) Posting notices regarding the package under section 7 of the act (35 P. S. § 7307) and Chapter 311 is not required.

(F) Training employes regarding the contents of the sealed packages under section 8 of the act (35 P. S. § 7308) and Chapter 313 is not required.

(G) Disclosing trade secrets contained in the sealed package under section 11 of the act (35 P. S. § 7311) and Chapter 317 (relating to trade secrets) is not required.

(H) Conducting onsite testing under section 3(h) of the act (35 P. S. § 7303(h)) and § 323.6 (relating to onsite testing of environmental hazards) is not required.

(3) *Employers without employes.* An employer is not required to comply with the following if the employer does not have present employes:

(i) Completing a Hazardous Substance Survey Form under section 3(e) of the act (35 P. S. § 7303(e)) and § 303.1.

(ii) Making readily available MSDSs for hazardous substances or hazardous mixtures available to employes under sections 4(b) and 5(e) of the act (35 P. S. §§ 7304(b) and 7305(e)) and Chapter 307.

(iii) Labeling containers of a hazardous substance, hazardous mixture, single chemical and mixture under sections 6(a)(1)—(5) and (6)(b)—(g) of the act (35 P. S. § 7306(a)(1)—(6) and (b)—(g)), and §§ 309.1(b)(2), 309.2(a)(i)—(iv), 309.3—309.6(a), (b), (e) and (f)



(relating to labeling; information required on label; common name usage; hazard warning; pipelines; and general conditions applying to labels).

(iv) Posting notices under section 7 of the act (35 P. S. § 7307) and Chapter 311.

(v) Providing education and training programs under section 8 of the act (35 P. S. § 7308) and Chapter 313.

(d) *Other statutes.*

(1) *Construction with Federal statutes.* This part shall be read in conjunction with Federal statutes or regulations providing for the identification, labeling or providing of information concerning hazardous substances, and is intended to supplement Federal regulations in the interests of protecting the health and safety of citizens of the Commonwealth.

(2) *Similar laws.* Evidence of compliance with other statutes that meet the requirements of the act constitutes compliance with similar provisions of the act and this part.

#### Source

The provisions of this § 301.3 adopted August 1, 1986, effective August 2, 1986, 16 Pa.B. 2909; amended March 25, 1988, effective in accordance with § 301.4, 18 Pa.B. 1471. Immediately preceding text appears at serial pages (109958) to (109962).

#### Cross References

This section cited in 34 Pa. Code § 301.3 (relating to jurisdiction/exemptions).

#### § 301.4. Effective dates.

(a) The following sections take effect August 3, 1987:

(1) The obligation to prepare MSDSs under section 4(b) of the act (35 P. S. § 7304(b)) and Chapter 307 (relating to Material Safety Data Sheet (MSDS)).

(2) The obligation of an employer to furnish, upon the request of an employe or employe representative, an MSDS for a hazardous substance or hazardous mixture present in the employer's workplaces under section 5(c)(2) of the act (35 P. S. § 7305(c)(2)) and Chapter 307.

(3) The obligation of an employer to furnish, upon the written request of an employe or employe representative, a copy of the requested MSDS under section 5(d) of the act (35 P. S. § 7305(d)) and Chapter 307.

(4) The obligation of an employer to ensure that a container, including pipelines containing a hazardous substance or hazardous mixture, is labeled, tagged or marked under section 6(a)(1) and (2) of the act (35 P. S. § 7306(a)(1) and (2)) and § 309.2(a)(1) and (2) (relating to information required on label).

(b) The following sections take effect August 2, 1988:

(1) The obligation of an employer to ensure that a container, including pipelines, containing a single chemical is labeled, tagged or marked under section 6(a)(3) of the act (35 P. S. § 7306(a)(3)) and § 309.2(a)(3).

(2) The obligation of an employer to ensure that a container, including pipelines, containing a mixture is labeled, tagged or marked under section 6(a)(4) of the act and (35 P. S. § 7306(a)(4)) and § 309.2(a)(4).

(c) The remaining provisions of this part shall take effect December 1, 1986.

**§ 301.5. Construction of regulations.**

(a) *No release from liability.* Nothing in this part relieves an employer or supplier from liability with regard to the health and safety of an employe or other persons exposed to substances, nor does it relieve an employer or supplier from a duty or responsibility under other statutes.

(b) *Local ordinances.* This part preempts and supersedes a local ordinance or rule concerning the subject matter of this part.

**§ 301.6. Retention of materials.**

The Department will maintain a file of complete Hazardous Substance Surveys and Environmental Hazard Survey Forms for 30 years. The Department will also retain at least one MSDS for a hazardous substance and hazardous mixture, together with revisions thereof.

**§ 301.7. Risk to public health.**

(a) If the Department determines that a hazardous substance or other chemical poses a potential health risk to the general public in an area surrounding the workplace, it will inform the nearest public health agency, hospital and fire company, and will submit to them copies of a relevant MSDS that it has in its possession.

(b) The criteria used by the Department in determining whether a hazardous substance or other chemical poses a potential health risk to the public include, but are not limited to the following:

(1) The nature and quantity of the hazardous substance or chemical present.

(2) The number of people who are being or may be exposed to the substances.

- (3) The nature of the area surrounding the workplace.
- (4) The nature, degree and type of risk posed by the substances to the general public.
- (c) The Department will use the most effective method of informing the nearest public health agency, hospital and fire company of the potential risk of public health posed by a hazardous substance or other chemical.

**§ 301.8. Computation of time.**

Time frames referred to in this part are based on calendar days, 1 Pa.C.S. § 1908 (relating to computation of time) and FED. R. CIV. P. 6(a) (28 U.S.C.A. (1986)) providing the computation of days.

### CHAPTER 303. PREPARATION OF HAZARDOUS SUBSTANCE AND ENVIRONMENTAL HAZARD SURVEY FORMS

Sec.

- 303.1. Hazardous Substance Survey Forms.
- 303.2. Environmental Hazard Survey Forms.
- 303.3. [Reserved].
- 303.4. [Reserved].
- 303.5. [Reserved].
- 303.6. [Reserved].

#### Cross References

This chapter cited in 34 Pa. Code § 311.2 (relating to workplace postings).

#### § 303.1. Hazardous Substance Survey Forms.

(a) The Hazardous Substance Survey Form shall contain the following information:

- (1) The names of hazardous substances present in the workplace as they appear in Appendix A.
- (2) The Chemical Abstracts Service (CAS) number, if a number has been assigned.
- (3) The employer name, address and Federal Employer Identification Number (FEIN).
- (4) The workplace name.
- (5) The time period covered by the survey.
- (6) The date the Hazardous Substance Survey Form was completed.
- (7) An indication as to whether a substance is a special hazardous substance or an environmental hazard.
- (8) The name, title and signature of the employer or employer representative completing the Hazardous Substance Survey Form.
- (9) The name and telephone number of a contact person who can provide additional information.

(b) The initial Hazardous Substance Survey Form for a workplace shall be completed on a form supplied by the Department no later than December 1, 1986.

(c) The Hazardous Substance Survey Form may constitute the lists of substances required to be posted under section 7(a)(1) of the act (35 P. S. § 7307(a)(1)) and § 311.2(a)(1)—(3) (relating to workplace postings). If the workplace and work area are identical, the completed Hazardous

Substance Survey Form may constitute the work area list required to be made available under section 7(a)(1) of act and § 305.4 (relating to maintenance and disclosure of work area lists).

(d) The Hazardous Substance Survey Form shall be updated at least annually, based on the most current Hazardous Substance List, Environmental Hazard List and Special Hazardous Substance List published by the Department under section 3 of the act (35 P. S. § 7303) and this chapter.

(e) Updated Hazardous Substance Survey Forms shall be completed no later than April 1 of each year and shall include hazardous substances which were present in the workplace during the prior calendar year. To the extent this form is also used to meet the requirements of § 305.4 it shall be updated when necessary.

(f) In meeting the requirements of this section, employers may either use forms provided by the Department or develop their own form which contains information required in this section and is legible and understandable.

#### Cross References

This section cited in 34 Pa. Code § 301.3 (relating to jurisdiction/exemption); and 34 Pa. Code § 305.2 (relating to maintenance and disclosure of Hazardous Substance Survey Forms).

### § 303.2. Environmental Hazard Survey Forms.

(a) An employer is required to complete an Environmental Hazard Survey Form for a particular workplace upon a written request from the Department and on a form supplied by the Department when requested to do so by the Department. The Department will require an employer to complete an Environmental Hazard Survey Form if the Department is requested to do so by a person in this Commonwealth. The Environmental Hazard Survey Form shall be completed and returned to the Department within 30 days of a request by the Department.

(b) The Environmental Hazard Survey Form shall contain information regarding those hazardous substances designated as environmental hazards on the Department's Hazardous Substance Lists which are emitted, discharged or disposed of from that workplace. The information required to be included on the Environmental Hazard Survey Form includes the following:

- (1) The total known or estimated stack or point-source emissions of the substance.
  - (2) The total estimated fugitive or nonpoint-source emissions of the substance.
  - (3) The total known or estimated discharge of the substance into the surface or groundwater, the treatment methods and the known or estimated raw wastewater volume and loadings.
  - (4) The total known or estimated discharge of the substance into publicly-owned treatment works.
  - (5) The known or estimated quantity and methods of disposal of wastes containing the substance, the method of onsite storage of the wastes, the location of the final disposal sites for the wastes and the identity of the hauler of the wastes.
- (c) The information specified in subsection (b) shall only be included on the Environmental Hazard Survey Form if the information is, at the time the Environmental Hazard Survey Form is completed, required to be reported under current provisions of a Federal, State, county or municipal environmental statute.
- (d) Employers have two options for completing the Environmental Hazard Survey Form:
- (1) Employers may complete the Environmental Hazard Survey Form as provided by the Department.
  - (2) The employer shall be deemed to have completed the Environmental Hazard Survey Form if the employer attaches to the form provided by the Department, the employer's list of environmental hazards emitted, discharged or disposed of from the workplace and reports, or portions thereof, required by current provisions of Federal, State, county or municipal statutes which contain the information specified in subsection (b).
- (e) Employers are required to update Environmental Hazard Survey Forms only upon request of the Department.
- (f) Employers shall keep a copy of the Environmental Hazard Survey Form on file at that workplace and at its principal place of business in this Commonwealth.
- (g) Procedures for disclosure of Environmental Hazard Survey Forms are governed by Chapter 305 (relating to maintenance and disclosure of survey forms and lists).
- (h) The Department will not require the completion or revision of an Environmental Hazard Survey Form more than once in a 12-month period.

**34 § 303.3**

**RIGHT-TO-KNOW**

**Pt. XIII**

**Cross References**

This section cited in 34 Pa. Code § 301.3 (relating to jurisdiction/exemptions); and 34 Pa. Code § 305.2 (relating to maintenance and disclosure of Hazardous Substances Survey Forms).

**§ 303.3. [Reserved].**

**§ 303.4. [Reserved].**

**§ 303.5. [Reserved].**

**§ 303.6. [Reserved].**

[Next page is 305-1.]

## CHAPTER 305. MAINTENANCE AND DISCLOSURE OF SURVEY FORMS AND LISTS

Sec.

- 305.1. Purpose and scope.
- 305.2. Maintenance and disclosure of Hazardous Substance Survey Forms.
- 305.3. Maintenance and disclosure of Environmental Hazard Survey Form.
- 305.4. Maintenance and disclosure of work area lists.
- 305.5. Fees.
- 305.6. Public access.

### Cross References

This chapter cited in 34 Pa. Code § 303.2 (relating to Environmental Hazard Survey Forms); and 34 Pa. Code § 311.2 (relating to workplace postings).

### § 305.1. Purpose and scope.

This chapter implements the maintenance and disclosure requirements of Hazardous Substance Survey Forms, Environmental Hazard Survey Forms and Lists under sections 3, 5 and 7 of the act (35 P. S. §§ 7303, 7305 and 7307).

### § 305.2. Maintenance and disclosure of Hazardous Substance Survey Forms.

#### (a) *Maintenance of Hazardous Substance Survey Forms.*

(1) An employer shall maintain a current Hazardous Substance Survey Form for each workplace, prepared under § 303.1 (relating to Hazardous Substance Survey Forms).

(2) The Hazardous Substance Survey Form shall be maintained until superseded by an updated Hazardous Substance Survey Form prepared under § 303.1.

#### (b) *Disclosure of Hazardous Substance Survey Form to employes.*

(1) An employer, who is a nonmanufacturer shall furnish, upon request of an employe or employe representative, a copy of the current Hazardous Substance Survey Form for the workplace to which the employe is assigned.

(2) Employers who are manufacturers are exempt from the requirement of paragraph (1).

#### (c) *Disclosure of Hazardous Substance Survey Form to the general public.*

(1) A person living or working in this Commonwealth may submit a written request to the Department for a Hazardous Substance Survey



Form. Written requests shall be sent to the Department of Labor and Industry, 7th and Forster Streets, Harrisburg, Pennsylvania 17120. Attention: Worker and Community Right-to-Know Program.

(2) The request shall include the following information:

- (i) Name and address of the person requesting the survey.
- (ii) The name, address and workplace of the employer.
- (iii) A description of the type of work or business engaged in by the requestor and a certification that the requestor is not a competitor of the employer from whom the Hazardous Substance Survey Form is requested. The certification, signed and dated by the requestor, shall include the following language:

"I hereby certify that, to the best of my knowledge, neither I, nor any member of my immediate family are now, or plan to be, a competitor or representative, employee, or agent of a competitor of the employer from whom I am making this request."

(3) An employer who receives a written request from the Department for a Hazardous Substance Survey Form, shall return the form within 20 calendar days of the date of receipt of the Department's request. Within 45 days of the receipt of the appropriate request, the Department will transmit a copy of the requested form to the original requestor, if the employer in question has responded to the Department's request unless the Department has a current copy on file.

(4) If upon receipt of the Hazardous Substance Survey Form, the Department determines that the form is not complete, the Department may return it to the employer and provide an explanation of the portions which need to be completed. An employer may be given no more than an additional 10 days from receipt of the Department's request to make the corrections and completions, after which the form shall again be returned to the Department.

(5) The name and address of the requestor shall be kept confidential by the Department except as provided by § 321.2(a) (relating to complaint and investigation procedure).

(d) *Disclosure of Hazardous Substance Survey Form to emergency response agencies.*

(1) Upon the written request of a local police, fire or emergency response agency within whose jurisdiction an employer falls, the employer shall provide a copy of its latest Hazardous Substance Survey Form for a workplace within the requesting agency's jurisdiction, within 20 days of receipt of the request.

(2) Absent good cause, no employer may be required to provide more than one copy of the most current Hazardous Substance Survey Form to the same emergency response agency.

(3) Disclosure of Hazardous Substance Survey Form by an emergency response agency shall be limited to official business purpose of the requesting agency.

#### Source

The provisions of this § 305.2 adopted August 1, 1986, effective August 2, 1986, 16 Pa.B. 2909; amended March 25, 1988, effective in accordance with § 301.4, 18 Pa.B. 1471. Immediately preceding text appears at serial pages (109969) to (109971).

#### Cross References

This section cited in 34 Pa. Code § 305.6 (relating to public access); and 34 Pa. Code § 307.15 (relating to public access).

### § 305.3. Maintenance and disclosure of Environmental Hazard Survey Form.

#### (a) Maintenance of Environmental Hazard Survey Form.

(1) An employer shall complete a Environmental Hazard Survey Form under § 303.2 (relating to Environmental Hazard Survey Forms).

(2) An employer who completes an Environmental Hazard Survey Form shall keep a copy of the form on file at the workplace to which the form applies and at the employer's principal place of business in this Commonwealth. Employers are required to keep only the most current Environmental Hazard Survey Form for a workplace.

(b) *Disclosure of Environmental Hazard Survey Form to employees.* A nonmanufacturing employer shall provide a copy of the Environmental Hazard Survey Form upon the request of an employee, only if such a survey has already been conducted under § 303.2.

(c) *Disclosure of Environmental Hazard Survey Form to the general public.*

(1) A person living or working in this Commonwealth may submit a written request to the Department for an Environmental Hazard Survey Form. Written requests shall be sent to: Department of Labor and Industry, 7th and Forster Streets, Harrisburg, Pennsylvania 17120. Attention: Worker and Community Right-to-Know Program.

(2) The request shall include the following information:

(i) The name and address of the person requesting the survey.

(ii) The name, address and workplace of the employer maintaining the Environmental Hazard Survey Form.

(iii) A description of the type of work or business engaged in by the requestor and a certification that the requestor is not a competitor of the employer from whom the Environmental Hazard Survey Form is requested. The certification, signed and dated by the requestor,

shall include the following language:

"I hereby certify that, to the best of my knowledge, neither I nor any member of my immediate family, are now, or plan to be a competitor or representative, agent or employee of a competitor of the employer from whom I am making this request."

(3) An employer who receives a written request from the Department for an Environmental Hazard Survey Form, shall return the form within 30 calendar days of the date of the Department's request. Upon receipt of a request meeting the requirements of paragraph (2), the Department will, within 45 days, transmit a copy of the form to the original requestor, if the employer in question has responded to the Department's request, unless the Department has a current Environmental Hazard Survey Form on file.

(4) If upon receipt of the Environmental Hazard Survey Form, the Department determines that the form is not complete, the Department may return it to the employer and provide an explanation of those portions which need to be completed. An employer may be given no more than an additional 10 days from receipt of the Department's notification to make corrections and completions, after which the form shall again be returned to the Department.

(5) The name and address of the requestor will be kept confidential by the Department, except as provided in § 321.2(a) (relating to complaint and investigation procedure).

(d) *Disclosure of Environmental Hazard Survey Form to emergency response agency.*

(1) Upon the written request of a local police, fire or emergency response agency within whose jurisdiction an employer falls, the employer shall provide a copy of the most current completed Environmental Hazard Survey Form, and relevant and available information concerning environmental hazards pertaining to the workplace in question, within 20 days of receipt of the request, if the Department had previously requested the completion of the form.

(2) Absent good cause, no employer may be required to provide more than one copy of the most current Environmental Hazard Survey Form to the same emergency response agency.

(3) Disclosure of Environmental Hazard Survey Forms by an emergency response agency is limited to the official business purpose of the requesting agency.

**Cross References**

This section cited in 34 Pa. Code § 301.3 (relating to jurisdiction/exemptions); 34 Pa. Code § 305.6 (relating to public access); and 34 Pa. Code § 307.15 (relating to public access).

**§ 305.4. Maintenance and disclosure of work area lists.**

(a) *Employer responsibilities.* A nonmanufacturing employer shall:

- (1) Furnish, upon request by an employee, a list of the hazardous substances used or produced in the employee's work area.
- (2) Offer a list of the hazardous substances to a new or newly assigned employee to a particular work area.
- (3) Update the lists as necessary but, at least annually.

(b) *Limitations on availability of copies of lists.* If a nonmanufacturing employer provides a particular list to an employee representative on behalf of a particular employee, the employer does not have to provide a copy of the same list to the employee represented by the representative.

**Cross References**

This section cited in 34 Pa. Code § 303.1 (relating to Hazardous Substance Survey Forms).

**§ 305.5. Fees.**

- (a) The nonmanufacturing employer may not charge an employee or employee representative for materials furnished by the employer. The employer may impose a reasonable charge, not to exceed the costs of reproduction, if the requestor had requested and received the same information about the same substance within the preceding 12 months.
- (b) No fee may be charged when an employee's job assignment has changed or new information is available concerning the subjects about which information is required to be provided.
- (c) No fee may be charged for requests from a certified or recognized bargaining agent to the extent the person is acting in his capacity as a certified or recognized bargaining agent.

**§ 305.6. Public access.**

A person living or working in this Commonwealth and who is not a competitor may request, under §§ 305.2(c) and 305.3(c) (relating to maintenance and disclosure of Hazardous Substance Survey Forms and maintenance and disclosure of Environmental Hazard Survey Form), from the Department a copy of the lists or forms required in section 3 of the act (35 P. S. § 7303) which are present in a particular workplace, and the Department will transmit the requested material within 45 days of receipt

34 § 305.6

RIGHT-TO-KNOW

Pt. XIII

of the request. A request will be treated by the Department as confidential as to the name and address of the requestor except as provided by § 321.2(a) (relating to complaint and investigation procedure). Materials will be available at a fee not to exceed the cost of reproducing them.

**Cross References**

This section cited in 34 Pa. Code § 301.3 (relating to jurisdiction/exemptions).

[Next page is 307-1.]

**CHAPTER 307. MATERIAL SAFETY DATA SHEET (MSDS)**

Sec.

- 307.1. Purpose and scope.
- 307.2. Content of MSDSs.
- 307.3. Format of MSDSs.
- 307.4. Similar substances.
- 307.5. Dilution with water.
- 307.6. Duty to test.
- 307.7. Agricultural mixtures.
- 307.8. Responsibility for preparing MSDSs.
- 307.9. Responsibility for providing MSDSs to purchasers.
- 307.10. Responsibility for providing MSDSs to the Department.
- 307.11. Employer's responsibilities to provide MSDSs to employees.
- 307.12. Responsibilities for providing MSDSs to emergency response agencies.
- 307.13. New information.
- 307.14. Limitation of fees.
- 307.15. Public access.

**Cross References**

This chapter cited in 34 Pa. Code § 301.3 (relating to jurisdiction/exemptions); 34 Pa. Code § 301.4 (relating to effective dates); and 34 Pa. Code § 319.2 (relating to prohibitions of discharge or discipline).

**§ 307.1. Purpose and scope.**

This chapter implements the content, format, maintenance and disclosure requirements for MSDSs under sections 4 and 5 of the act (35 P. S. §§ 7304 and 7305).

**§ 307.2. Contents of MSDSs.**

(a) The information in the MSDS shall be in English and shall reflect the contents of the relevant National Library of Medicine computer files and the latest edition of the National Fire Association's *Fire Protection Guide on Hazardous Materials*. Subject to the trade secret provisions of section 11 of the act (35 P. S. § 7311) and Chapter 317 (relating to trade secrets), it shall also include, but not be limited to, the following information, if applicable:

- (1) The chemical name, the Chemical Abstracts Service number, the trade name, common names and other names under which the substance is regulated by another State or Federal agency.

- (2) The chemical name, common name and Chemical Abstracts Service number of every chemical contained in the substance which comprises 3.0% or more of the substance, except that hazardous substances shall be listed if they comprise 1.0% or more of the substance, and special hazardous substances which comprise 0.01% or more of the substance shall be listed.
- (3) A reference to relevant information on the hazardous substance from the NIOSH Registry of Toxic Effects of Chemical Substances.
- (4) The boiling point, vapor pressure, vapor density, solubility in water, specific gravity, melting point, physical state, color and odorous properties at standard conditions of temperature and pressure.
- (5) The flash point, auto ignition temperature, percentage of volume of flammable limits, the recommended fire extinguishing media, special firefighting procedure and other unusual fire or explosion hazards.
- (6) The hazards, posed by the substance, including its toxicity, tumorigenicity, mutagenicity, reproductive flammability, explosiveness, corrosivity and reactivity, including specific information on its reactivity with water.
- (7) A description, in nontechnical language, of the acute and chronic health effects of exposure to the substance, including the signs and symptoms of exposure, and medical conditions which are generally recognized as being aggravated by exposure to the substance.
- (8) The permissible exposure level, threshold limit value, short-term ceiling and other established limit values as set by OSHA, National Institute of Occupational Safety and Health, American Industrial Hygiene Association and American Conference of Governmental Industrial Hygienists.
- (9) The potential routes and symptoms of exposure to the hazardous substances.
- (10) Emergency first aid procedures in case of inhalation, swallowing, eye splashes and skin contamination, including a telephone number to be called day or night in an emergency and special information needed by medical practitioners treating persons.
- (11) The appropriate emergency and first aid procedures for spills, fires, potential explosions and accidental or unplanned emissions involving the hazardous substance.
- (12) Recommended waste disposal method, if applicable.

(13) Personal protective equipment to be worn or used when handling or otherwise coming in contact with the substance and special precautions, recommended engineering controls or work practices to be used in handling the substance.

(14) A description of the extent of testing performed on the substance.

(15) A description of the known synergistic or additive effects reasonably anticipated by exposure to the substance and to other substances over the same period of time.

(16) For mixtures, a description of known dangers or hazards created by the mixture that are greater than and would not be otherwise disclosed by the Hazardous Substance Fact Sheets for the constituent chemical substances.

(17) The name, address and telephone number of the manufacturer of the chemical.

(18) Date of preparation or last revision of the sheet.

(b) An MSDS which contains the following information is considered to have met the requirements of this section:

(1) The chemical name, the Chemical Abstracts Service number, the trade name, common name and other names under which the substance is regulated by another State or Federal Agency.

(2) The chemical name, common name and Chemical Abstracts Service number of every chemical contained in the substance which comprises 3% or more of the substance except that hazardous substances shall be listed if they comprise 1% or more of the substance, and special hazardous substances which comprise .01% or more of the substance shall be listed.

(3) The information required by 29 CFR 1900.1200(g)(2) (relating to hazard communication).

#### Cross References

This section cited in 34 Pa. Code § 307.3 (relating to format of MSDSs).

### § 307.3. Format of MSDSs.

(a) *Submission.* MSDSs may be submitted to the Department in one of the following formats:

(i) Forms provided by the Department.



(2) Computer magnetic tape, microfiche or floppy disks, if these formats are submitted in accordance with record layouts prescribed by the Department.

(3) Other formats which contain the information required by § 307.2 (relating to contents of MSDSs), if both the requesting party and the providing party agree to the format.

(b) *Chemical identification sheets.* An employer or supplier may provide the information requested in § 307.2(a)(2) by affixing a chemical identification sheet containing the information to an already existing MSDS and it shall be considered an integral part of the MSDS.

**§ 307.4. Similar substances.**

If hazardous mixtures have similar contents and hazards, but vary in specific composition, the supplier or employer may prepare one MSDS to apply to all of the similar hazardous mixtures, if the MSDS:

- (1) Identifies the various mixtures by the names to which it applies.
- (2) Is correct in all respects and correctly states the constituent chemicals in the hazardous mixtures.

**§ 307.5. Dilution with water.**

It is not necessary to produce a new MSDS when a hazardous substance is diluted with water.

**§ 307.6. Duty to test.**

No employer or supplier is required to conduct studies to develop new information.

**§ 307.7. Agricultural mixtures.**

If a farm supplier combines one or more chemicals for agricultural use, the farm supplier may substitute MSDSs for the ingredients in the mixture in lieu of preparing a new MSDS.

**§ 307.8. Responsibility for preparing MSDSs.**

(a) Manufacturers, importers or suppliers, as a condition of doing business in this Commonwealth, shall prepare an MSDS for each hazardous substance or hazardous mixture they produce or import.

(b) Distributors who are not manufacturers, suppliers or importers have no obligation to prepare an MSDS.

**Source**

The provisions of this § 307.8 adopted August 1, 1986, effective August 2, 1986, 16 Pa.B. 2909; amended March 25, 1988, effective in accordance with § 301.4, 18 Pa.B. 1471. Immediately preceding text appears at serial pages (109978) to (109979).

**Cross References**

This section cited in 34 Pa. Code § 301.3 (relating to jurisdiction/exemptions); and 34 Pa. Code § 307.13 (relating to new information).

**§ 307.9. Responsibility for providing MSDSs to purchasers.****(a) Manufacturers, importers or suppliers:**

(1) Shall ensure that purchasers of hazardous substances or hazardous mixtures are provided with an appropriate MSDS at the following times:

- (i) With their initial shipment.
- (ii) With the first shipment after an MSDS is updated.

(2) Shall ensure that purchasers of any other chemical delivered to a point within this Commonwealth are provided an appropriate MSDS, if the manufacturer, importer or supplier produces or possesses the MSDS.

(3) Shall notify purchasers of hazardous substances or hazardous mixtures that the hazardous substance or hazardous mixture is subject to the act.

(4) May mail the MSDS to the purchaser at the time of shipment in lieu of physically attaching the MSDS to the container they ship.

**(b) Distributors:**

(1) Shall ensure that purchasers of hazardous substances or hazardous mixtures are provided an appropriate MSDS at the following times:

- (i) With their initial shipment.
- (ii) With the first shipment after an MSDS is updated.

(2) Shall notify purchasers of hazardous substances or hazardous mixtures that the hazardous substance or hazardous mixture is subject to the act.

(3) May mail the MSDS to the purchaser at the time of shipment in lieu of physically attaching the MSDS to the container they ship.

**Source**

The provisions of this § 307.9 adopted August 1, 1986, effective August 2, 1986, 16 Pa.B. 2909; amended March 25, 1988, effective in accordance with § 301.4, 18 Pa.B. 1471. Immediately preceding text appears at serial pages (109979) to (109980).

**Cross References**

This section cited in 34 Pa. Code § 307.13 (relating to new information).

**§ 307.10. Responsibility for providing MSDSs to the Department.**

Manufacturers, importers or suppliers shall mail to the Department:

(1) One copy of an MSDS for a hazardous substance or hazardous mixture which they produce within or deliver to a point in this Commonwealth, at the same time as their initial shipment to an employer within this Commonwealth.

(2) One copy of an MSDS for another chemical for which they produce or possess an MSDS at the time of the initial shipment of the chemical to an employer in this Commonwealth.

(3) One copy of an updated MSDS at the same time the updated MSDS is provided to an employer within this Commonwealth.

(4) For the situations described in paragraphs (1)—(3) the manufacturer, importer or supplier need only mail one copy of the MSDS to the Department. Once an MSDS is on file with the Department, copies need not be provided with each shipment of the chemical to different customers, except as provided in paragraph (3).

**Cross References**

This section cited in 34 Pa. Code § 307.13 (relating to new information).

**§ 307.10a. Employer responsibilities for obtaining and maintaining MSDSs.**

Employers shall obtain and maintain an MSDS for each hazardous substance or hazardous mixture in the workplace. If an MSDS is not provided with the shipment, the employer shall obtain one from the manufacturer, importer, supplier or distributor.

**Source**

The provisions of this § 307.10a adopted March 25, 1988, effective in accordance with § 301.4, 18 Pa.B. 1471.

**§ 307.11. Employer's responsibilities to provide MSDSs to employees.**

(a) (Reserved).

(b) The nonmanufacturing employer shall make readily available without permission or intervention from management or a supervisor, in every work area, if practical, the MSDS for every hazardous substance or hazardous mixture to which the employee working in the work area may be exposed. If it is impractical to make an MSDS readily available in a work area without permission or intervention from management or supervision, the MSDS shall be made available in a location as close to the work area as is practical so that employees may have access to the MSDSs without permission or intervention of management or supervision.

(c) The nonmanufacturing employer shall furnish, upon the request of an employe or employe representative, an MSDS for a hazardous substance or hazardous mixture present in the employer's workplaces.

(d) The nonmanufacturing employer shall furnish a copy of an MSDS to an employe or employe representative within 5 working days of the receipt of a written request.

(1) If the nonmanufacturing employer is in possession of the requested MSDS, and fails to give the MSDS to the employe or employe representative, the employe has the right to refuse to work with the specific hazardous substance, without penalty, until the information requested is provided.

(2) If the nonmanufacturing employer is not in possession of the requested MSDS, the employer shall:

(i) Within 5 working days of the receipt of the employe's written request, notify the employe in writing that the information is not in the employer's possession.

(ii) Within 15 working days of the written notification to the employe, the employer shall attempt to obtain the requested information from the supplier and the Department, and shall document the attempts. Upon receipt of the nonmanufacturing employer's request, the Department will immediately attempt to obtain the requested information from the supplier and notify the nonmanufacturing employer of the attempt.

(iii) The employe has the right to refuse to work, without penalty, until the requested information is furnished, unless the nonmanufacturing employer and the Department have taken the actions prescribed in this section.

(3) Reassignment of an employe to other work, at equal pay and benefits, is not considered a penalty under this section.

#### Source

The provisions of this § 307.11 adopted August 1, 1986, effective August 2, 1986, 16 Pa.B. 2909; amended March 25, 1988, effective in accordance with § 301.4, 18 Pa.B. 1471. Immediately preceding text appears at serial pages (109980) to (109981).

#### Cross References

This section cited in 34 Pa. Code § 307.13 (relating to new information).

307-7

(126541) No. 166 Sep. 88

**§ 307.12. Responsibilities for providing MSDSs to emergency response agencies.**

Employers shall furnish copies of relevant MSDSs upon a written request from a local police, fire or emergency response agency within whose jurisdiction the employer falls, within 20 days of receipt of the request. The agencies shall only use the MSDS for its official business.

**Source**

The provisions of this § 307.12 adopted August 1, 1986, effective August 2, 1986, 16 Pa.B. 2909; amended March 25, 1988, effective in accordance with § 301.4, 18 Pa.B. 1471. Immediately preceding text appears at serial page (109982).

**§ 307.13. New information.**

If a supplier receives or discovers relevant new information regarding a hazardous substance, the supplier shall make the information available to the Department and to employers to which the supplier had previously provided an MSDS under §§ 307.8—307.11 (relating to responsibility for preparing MSDSs; responsibility for providing MSDSs to purchasers; responsibility for providing MSDSs to the Department; employer's responsibilities to provide MSDSs to employees). The nonmanufacturing employer shall, in turn, make the information available to employees and the employees' representatives, upon receipt of the new information.

**Cross References**

This section cited in 34 Pa. Code § 301.3 (relating to jurisdiction/exemptions).

**§ 307.14. Limitation of fees.**

MSDSs, educational and other materials shall be furnished by a nonmanufacturing employer upon request to an employee or employee representative at no cost to the employee or employee representative. If an employee making the request has requested and received the same information about the same substance within the preceding 12 months, the nonmanufacturing employer may impose a reasonable charge, not to exceed the costs of reproduction, for the information. No fee may be charged if a requesting employee's job assignment has changed or there is new information available concerning the subjects about which information is required to be provided. The nonmanufacturing employer may not charge fees for requests by a certified or recognized bargaining agent to the extent the person is acting in his capacity as a certified or recognized bargaining agent.

**§ 307.15. Public access.**

(a) A person living or working in this Commonwealth and who is not a competitor may request from the Department an MSDS on file and the Department will transmit the requested material within 45 days of receipt of the request.

(b) If an employer receives a request for an MSDS from the Department, the employer shall respond with the appropriate information within 20 days of the Department's request. If the employer does not possess the requested information, the employer shall notify the Department in writing, within 20 days of the Department's request, documenting the reasons why the requested information is not available and what attempts have been made to obtain the information.

(c) The name and address of the requestor will be treated by the Department as confidential, except as provided by § 321.2(a) (relating to complaint and investigation procedure). Requests shall be made under §§ 305.2(c) and 305.3(c) (relating to maintenance and disclosure of Hazardous Substance Survey Forms and maintenance and disclosure of Environmental Hazard Survey Forms). Materials shall be available at a fee not to exceed the cost of reproducing them.

[Next page is 309-1.]

307-10

(109984) No. 145 Dec. 86

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**CHAPTER 309. LABELING OF SUBSTANCES**

Sec.

- 309.1. Labeling.
- 309.2. Information required on label.
- 309.3. Common name usage.
- 309.4. Hazard warning.
- 309.5. Pipelines.
- 309.6. General conditions applying to labels.
- 309.7. Supplier responsibilities.
- 309.8. Right to information not included on the label.
- 309.9. Construction of this chapter.

**Cross References**

This chapter cited in 34 Pa. Code § 301.2 (relating to definitions); and 34 Pa. Code § 301.3 (relating to jurisdiction/exemptions).

**§ 309.1. Labeling.**

(a) *Purpose and scope.* This chapter implements the labeling requirements under section 6 of the act (35 P. S. § 7306). This chapter governs requirements with regard to the labeling of containers of hazardous substances, hazardous mixtures, single chemicals and mixtures and the labeling of pipelines by employers and suppliers doing business in this Commonwealth. This chapter also covers hazard warnings and exemptions from the labeling requirement, including those based upon trade secrets, under section 11 of the act (35 P. S. § 7311) and Chapter 317 (relating to trade secrets).

(b) *Labeling exemptions.*

(1) *Compliance with Federal statutes.* If containers are labeled as required under applicable Federal statutes and regulations, this chapter does not require labeling of containers which contain the following:

(i) A pesticide as the term is defined in the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C.A. §§ 135—135K and 136—136y).

(ii) A food, drug or cosmetic as the terms are defined in the Federal Food, Drug and Cosmetic Act (21 U.S.C.A. § 321).

(iii) Distilled spirits—beverage alcohols—wine or malt beverage intended for nonindustrial use as the terms are defined in the Federal Alcohol Administration Act (27 U.S.C.A. §§ 201—212).

(iv) Hazardous waste from spills and disposal site rehabilitation projects handled under the Resource Conservation and Recovery Act



of 1976 (42 U.S.C.A. §§ 6901—6986) or the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (26 U.S.C.A. §§ 4611—4682) and (42 U.S.C.A. §§ 6911, 6911a and 9601—9657).

(2) *Transfer for immediate use.* The employer is not required to label a container into which a chemical or mixture is transferred by the employe from labeled containers and which is intended only for the immediate use by the employe who performs the transfer.

(3) *Manufacturing exemption.* Employers which are manufacturers are not required to meet labeling requirements contained in this chapter in their workplaces or work areas.

#### Source

The provisions of this § 309.1 adopted August 1, 1986, effective August 2, 1986, 16 Pa.B. 2909; amended March 25, 1988, effective in accordance with § 301.4, 18 Pa.B. 1471. Immediately preceding text appears at serial pages (109985) to (109986).

#### Cross References

This section cited in 34 Pa. Code § 301.3 (relating to jurisdiction/exemptions); and 34 Pa. Code § 309.2 (relating to information required on label).

### § 309.2. Information required on label.

(a) Subject to the exemptions in § 309.1(b) (relating to labeling), employers shall ensure that a container of the following substances present in the workplace and that a container of the following substances leaving the workplace is clearly labeled, tagged or marked with information listed in paragraphs (1)—(4):

(1) Containers of hazardous substances shall be labeled, tagged or marked with the following:

(i) The chemical name or common name under § 309.3 (relating to common name usage).

(ii) A hazard warning, under § 309.4 (relating to hazard warning).

(iii) The name, address and telephone number of the manufacturer.

(2) Containers of hazardous mixtures shall be labeled, tagged or marked with the following:

(i) The common name under § 309.3 but, if none exists, then the trade name.

(ii) The chemical or common name of special hazardous substances comprising .01% or more of the mixture.

- (iii) The chemical or common name of hazardous substances constituting 1.0% or more of the mixture.
  - (iv) A hazard warning, under § 309.4.
  - (v) The name, address and telephone number of the manufacturer.
- (3) Containers of single chemicals shall be labeled, tagged or marked with the following:
- (i) The chemical name or common name, under § 309.3.
  - (ii) A hazard warning, as provided in § 309.4, if appropriate.
  - (iii) The name, address and telephone number of the manufacturer.
- (4) Containers of chemical mixtures shall be labeled, tagged or marked with the following:
- (i) The common name but, if none exists, then the trade name.
  - (ii) A hazard warning, as provided in § 309.4, if appropriate.
  - (iii) The name, address and telephone number of the manufacturer.
  - (iv) The chemical name or common name of either the top five substances by volume or those substances constituting 5.0% or more of the mixture.
- (b) A label may contain other information, including trade or brand name, if the information required by this chapter is clearly legible.

#### Cross References

This section cited in 34 Pa. Code § 301.3 (relating to jurisdiction/exemptions); and 34 Pa. Code § 301.4 (relating to effective dates).

#### § 309.3. Common name usage.

A common name or trade name may be used only if the use of the name more easily or readily identifies the true nature of the hazardous substance, hazardous mixture, single chemical or mixture involved.

#### Cross References

This section cited in 34 Pa. Code § 301.3 (relating to jurisdiction/exemptions); 34 Pa. Code § 309.2 (relating to information required on label); and 34 Pa. Code § 309.6 (relating to general conditions applying to labels).

#### § 309.4. Hazard warning.

(a) Container labels shall provide a warning as to the specific nature of the hazard arising from the substance in the container.

(b) The hazard warning shall be given in conformity with one of the nationally recognized and accepted systems of providing warnings, and hazard warnings shall be consistent with one or more of the recognized systems throughout the workplace. Examples are:

- (1) NFPA 704, Identification of the Fire Hazards of Materials.
- (2) National Paint and Coatings Association: Hazardous Materials Identification System.
- (3) American Society for Testing and Materials, Safety Alert Pictorial Chart.
- (4) American National Standard Institute, Inc., for the Precautionary Labeling of Hazardous Industrial Chemicals.

#### Cross References

This section cited in 34 Pa. Code § 301.3 (relating to jurisdiction/exemptions); 34 Pa. Code § 309.2 (relating to information required on label); and 34 Pa. Code § 309.6 (relating to general conditions applying to labels).

#### § 309.5. Pipelines.

(a) *Ports required to be labeled.* The content of a pipeline system shall be identified by labels applied at or near ports. A port is a point of access, which may be opened to the environment, used for charging or discharging a system at which an employe may come into direct contact with a chemical under normal conditions of use.

(b) *Alternative methods.* The employer may develop alternative methods to adequately apprise anyone who may be potentially exposed at a port of the contents of the pipeline in the following cases:

(1) If a pipeline is used to convey different chemicals at different times.

(2) An environmental health and pest control system or other system designed to automatically discharge a chemical from spray-type ports.

(c) *Exclusions.* The requirements of subsections (a) and (b) do not apply to the following substances:

- (1) Pipelines containing only effluents.
- (2) Pipelines containing only water discharges.
- (3) Emissions through stacks.
- (4) Discharge conduits.
- (5) Fire sprinkler systems containing only water.
- (6) Pipelines containing only water.

**Cross References**

This section cited in 34 Pa. Code § 301.3 (relating to jurisdiction/exemptions).

**§ 309.6. General conditions applying to labels.**

(a) The nonmanufacturing employer may use signs, placards, operating procedures or other printed materials as alternatives to individual labels on stationary equipment, agricultural implements and portable or mobile machinery used in outdoor or temporary worksites, if the alternative used indicates the appropriate chemical or common name and hazard warnings and is readily available to employees.

(b) The nonmanufacturing employer shall ensure that a label, sign, placard or other operating instructions required by this chapter is legible and prominently affixed in and displayed to the container or port so that employees can easily identify the substance or mixture present therein.

(c) The nonmanufacturing employer may not remove or deface existing labels on incoming containers of chemicals, unless the container is immediately relabeled with the required information.

(d) The nonmanufacturing employer need not affix new labels to comply with this chapter if the existing labels already convey the required information that the chemical or common name on the container is the same as that listed on the MSDS and can be used by the employee as a cross-reference to the MSDS.

(e) The nonmanufacturing employer shall ensure that the chemical or common name used on the container to identify a hazardous substance or mixture is the same as the chemical or common name used on the MSDS if the following apply:

(1) That is the information available for the hazardous substance or mixture.

(2) The MSDS or hazardous substance fact sheet (HSFS) is readily available to the employee in the work area.

(f) No employer is required to test a chemical to determine the accuracy of the label.

(g) Label requirements may only be altered as follows:

(1) Common name usage, under § 309.3 (relating to common name usage).

(2) Signs, placards, operating procedures or other printed materials, under subsections (a)—(f).

(3) Hazard warnings, under § 309.4 (relating to hazard warning).

(4) Trade secrets, under Chapter 317 (relating to trade secrets).

**Cross References**

This section cited in 34 Pa. Code § 301.3 (relating to jurisdiction/exemptions).

**§ 309.7. Supplier responsibilities.**

A supplier, as a condition of doing business in this Commonwealth shall ensure that the container of a chemical which is delivered to a point within this Commonwealth by the supplier, or which is produced within this Commonwealth by the supplier, is clearly labeled in the manner required by this chapter.

**Source**

The provisions of this § 309.7 adopted August 1, 1986, effective August 2, 1986, 16 Pa.B. 2909; amended March 25, 1988, effective in accordance with § 301.4, 18 Pa.B. 1471. Immediately preceding text appears at serial page (109990).

**§ 309.8. Right to information not included on the label.**

(a) The nonmanufacturing employer has 5 working days from the receipt of an employee's request to provide the chemical name or Chemical Abstracts Service number of substance to an employee, if the following apply:

(1) A chemical name or a Chemical Abstracts Service number exists, but the container is not labeled with either.

(2) The employee requests the chemical name or Chemical Abstracts Service number in writing.

(3) A chemical name or Chemical Abstracts Service number is in the possession of the employer.

(b) If the nonmanufacturing employer is not in possession of the chemical name or Chemical Abstracts Service number, the employer shall so notify the employee in writing within 5 working days of the initial employee request. The employee may request that the Department supply the chemical name or Chemical Abstracts Service number. The employee's written request to the Department shall include a copy of the employee's request to the employer and the employer's written response.

**§ 309.9. Construction of this chapter.**

This chapter is to be read in conjunction with Federal statutes providing for the labeling of hazardous substances and is intended to supplement Federal regulations in the interest of protecting the health and safety of citizens of this Commonwealth.

**CHAPTER 311. POSTING OF NOTICES AND OTHER INFORMATION**

Sec.

- 311.1. Purpose and scope.
- 311.2. Workplace postings.
- 311.3. Outdoor or temporary worksites.

**Cross References**

This chapter cited in 34 Pa. Code § 301.3 (relating to jurisdiction/exemptions).

**§ 311.1. Purpose and scope.**

This chapter implements the posting requirements under section 7 of the act (35 P. S. § 7307), and governs the requirements for the posting of notices in the workplace and in outdoor and temporary worksites.

**§ 311.2. Workplace postings.**

(a) A nonmanufacturing employer shall prominently post the following in locations where notices to employees are normally posted:

- (1) Lists of hazardous substances found in the workplace.
- (2) Lists of special hazardous substances found in the workplace.
- (3) Lists of environmental hazards which are emitted, discharged or disposed of from the workplace.
- (4) Notification to employees and their representatives of their rights under the act.
- (5) A notice containing this information will be provided by the Department.

(b) To the extent lists of substances are consolidated under Chapters 303 and 305 (relating to preparation of Hazardous Substance and Environmental Hazard Survey Forms and maintenance and disclosure of Survey Forms and Lists), a single notice of consolidated lists is acceptable for purposes of subsection (a)(1)–(3).

(c) A nonmanufacturing employer shall update the lists as necessary, but at least annually.

34 § 311.3

RIGHT-TO-KNOW

Pt. XIII

**Cross References**

This section cited in 34 Pa. Code § 303.1 (relating to Hazardous Substance Survey Forms).

**§ 311.3. Outdoor or temporary worksites.**

In the case of an outdoor or temporary worksite which is not contiguous to a building regularly used by a nonmanufacturing employer as a workplace, postings of notices, as well as MSDSs and other materials shall be in a location where employees, during a course of a normal day, have access which does not depend on the permission or intervention of management or a supervisor.

[Next page is 313-1.]

**CHAPTER 313. EMPLOYER EDUCATIONAL AND TRAINING PROGRAM**

Sec.

- 313.1. Purpose and scope.
- 313.2. Employer responsibilities.
- 313.3. Content of training program.
- 313.4. Construction with other laws.

**Cross References**

This chapter cited in 34 Pa. Code § 301.3 (relating to jurisdiction/exemptions).

**§ 313.1. Purpose and scope.**

This chapter implements the education and training requirements under section 8 of the act (35 P. S. § 7308).

**§ 313.2. Employer responsibilities.**

(a) A nonmanufacturing employer shall provide an annual education and training program for employees exposed to hazardous substances or hazardous mixtures found in the employee's work area. This program shall be provided at least once in a calendar year.

(b) A new employee shall be trained in regard to the hazardous substances or hazardous mixtures found in the work area under subsection (a). This initial training shall take place within 120 days of hire.

(c) If necessary, additional instruction shall be provided to appropriate employees if any of the following events occurs:

(1) The potential for the employee's exposure to the hazardous substance or hazardous mixture is different from that for which training was previously provided to the employee.

(2) An employee is reassigned to a different work area, resulting in exposure to hazardous substances or hazardous mixtures which is different from the hazards for which training was previously provided to the employee.

(3) A nonmanufacturing employer receives new and significant information concerning the hazardous substance or hazardous mixture in the employee's work area and to which the employee is exposed.

(d) The nonmanufacturing employer shall maintain written records of names of employees who were trained and dates of training. The records shall be retained until superseded by the records of the next annual



training, and shall be made available upon request to an authorized representative of the Department during an investigation or inspection under section 14 of the act (35 P. S. § 7314).

**§ 313.3. Content of training program.**

(a) Nonmanufacturing employers shall furnish employes who are using or handling hazardous substances or hazardous mixtures with information on the contents of an MSDS, label or equivalent information either in written form or through training programs which may be generic to the extent appropriate and related to the job.

(b) The content of a training program shall include, as appropriate, the following information concerning the hazardous substances or hazardous mixtures:

- (1) The location.
- (2) The properties.
- (3) The chemical and common name.
- (4) The acute and chronic effects.
- (5) The symptoms arising from exposure.
- (6) The potential for flammability, explosivity and reactivity.
- (7) Appropriate emergency treatment.
- (8) Appropriate personal protective equipment and proper conditions for safe use.
- (9) Emergency procedures for spills, leaks, fires, pipeline breakdowns or other accidents.

(c) Nothing in this chapter prohibits nonmanufacturing employers from training employes through the categorization of substances according to their type of hazards.

**§ 313.4. Construction with other laws.**

(a) This chapter shall be construed in conjunction with statutes or collective bargaining agreements providing for the training of employes, and is intended to supplement other statutes or collective bargaining agreements in the interests of protecting the health and safety of citizens of this Commonwealth.

(b) Evidence of compliance with other statutes or collective bargaining agreements that meet the requirements of this chapter constitute compliance with this chapter.



**§ 315.5. Release of information.**

The Department will not release information in a way that directly or indirectly identifies individuals. The Department may publish an analysis of reports and information for scientific and public health purposes if the identities of the individuals concerned cannot be ascertained directly or indirectly and if information protected by applicable trade secret law is not divulged.

## CHAPTER 317. TRADE SECRETS

Sec.

- 317.1. Purpose and scope.
- 317.2. Trade secret claims.
- 317.3. Disclosure for health professionals.
- 317.4. Penalties for disclosure of confidential information.
- 317.5. Protection of confidential information certified by Federal officials.
- 317.6. Construction of chapter.

## Cross References

This chapter cited in 34 Pa. Code § 301.3 (relating to jurisdiction/exemptions); 34 Pa. Code § 307.2 (relating to contents of MSDSs); 34 Pa. Code § 309.1 (relating to labeling); 34 Pa. Code § 309.6 (relating to general conditions applying to labels); and 34 Pa. Code § 321.8 (relating to judicial review and enforcement).

**§ 317.1. Purpose and scope.**

This chapter implements the requirements relating to trade secret claims, under section 11 of the act (35 P. S. § 7311).

**§ 317.2. Trade secret claims.**

(a) *Withholding of chemical name.* An importer, employer, manufacturer or supplier may withhold the chemical name or other specific identification of a chemical as a trade secret, if the following conditions are met:

- (1) The claim that the information withheld is a trade secret can be supported by the importer, employer, manufacturer or supplier making the claim.
- (2) The MSDS discloses the information concerning the properties and effects of the hazardous substance or hazardous mixture.
- (3) The label and MSDS show the following:
  - (i) The specific chemical identity is being withheld as a trade secret.
  - (ii) A trade secret for a special hazardous substance is being claimed.
- (4) The specific chemical identity is made available to health professional under § 317.3 (relating to disclosure to health professionals).
- (5) The importer, employer, manufacturer or supplier making the trade secret claim files a notice of the claim with the Department. This notice may not require the person making the claim to disclose the

information which is claimed to be a trade secret. An MSDS containing a notation that the information is a trade secret is sufficient notice for this paragraph.

(b) *Review of trade secret claims.*

(1) An aggrieved person or employe representative may request a review of a trade secret claim, but an appeal from the decision of the Department does not give the person the right of access to information considered confidential in paragraph (4). The request shall contain the following:

(i) The name and address of the person requesting review.

(ii) A description of the type of work or business engaged in by the requestor.

(iii) The name and address of the entity whose trade secret is sought to be reviewed.

(iv) A certification that the requestor is not a competitor of the entity from whom the trade secret review is requested. The certification shall include the following language: "I hereby certify that, to the best of my knowledge, I nor any member of my immediate family am now, nor plan to be, a competitor or representative, employe or agent of a competitor of the entity from whom I am making this request." This certification shall be signed and dated by the requestor.

(v) Other information which is supportive of the requestor's claim that the information sought is not a trade secret.

(2) Within 30 days of the receipt of the aggrieved person's or employe representative's written request or, upon its initiative, the Department will notify the person claiming the trade secret to file an application and supporting evidence. The application shall be on a form supplied by the Department.

(3) Reviews of trade secret claims under this section shall give regard to similar decisions by other Federal or Commonwealth agencies or Pennsylvania courts, or both.

(4) Proceedings shall be in conformity with 1 Pa. Code Part II (relating to general rules of administrative practice and procedure) and shall be closed to persons except the employer, supplier, manufacturer or importer and the Department.

(i) Trade secret applications, pleadings, hearing transcripts, documents and other records filed with the Department or a court under a review of trade secret claims or appeals thereof shall be confidential and may not be disclosed to the public.

(ii) The notice of claim filed with the Department and a petition for review or other pleading filed with the courts which do not reveal either the trade secret or information claimed as confidential shall be considered as public records.

(iii) Records that reveal either the trade secret or information claimed as confidential shall be sealed and held as confidential by the Department or, upon request, returned to the employer, supplier, manufacturer or importer at the close of proceedings hereunder.

(5) If the Department finds that the information in question is not a trade secret as defined by the act and this part, it will order disclosure of the information. The order is a final adjudication appealable to the Commonwealth Court. An appeal shall act as a stay to an order of the Department or a court which requires disclosure.

#### Cross References

This section cited in 34 Pa. Code § 317.2 (relating to trade secret claims).

### § 317.3. Disclosure to health professionals.

#### (a) *Treating physicians and nurses.*

##### (1) *Nonemergency situation.*

(i) An employer, manufacturer, importer or supplier shall disclose the chemical identification or other information claimed as a trade secret to a treating physician or nurse if:

(A) The request is in writing.

(B) The information is needed for medical diagnosis or medical treatment of an exposed person.

(ii) An employer, manufacturer, importer or supplier may require the treating physician or nurse to sign a confidentiality agreement before disclosing the trade secret.

##### (2) *Emergency situation.*

(i) An employer, manufacturer, importer or supplier shall immediately disclose the trade secret to the treating physician or nurse in the case of a medical emergency.

(ii) An employer, manufacturer, importer or supplier may require a confidentiality agreement when circumstances permit.

(iii) As used in this section, an emergency is a situation which poses a risk of endangering the health or safety of an exposed person and which calls for prompt action to eliminate or reduce the risk.

(b) *Other health professionals.*

(1) Upon the request of a health professional who is not a treating physician or nurse, an employer, supplier, manufacturer or importer shall disclose information which is claimed as a trade secret under the same conditions and subject to the same requirements as contained in the OSHA Hazard Communication Standard, 29 CFR 1910.1200(i)(3), (4) and (7) (relating to hazard communication.)

(2) A health professional whose request for information is denied under this section may file a complaint or charge with the Department.

(3) If the Department concludes that the information is not a *bona fide* trade secret, or that it is a trade secret but the requesting health professional has a legitimate medical or occupational health need for the information, has executed a written confidentiality agreement and has shown adequate means to protect the confidentiality of the information, the Department may find the employer, supplier, manufacturer or importer in violation of the act and order them to disclose the requested information to the health professional.

(c) *Confidentiality agreement.* The confidentiality agreement under sections 11(c) and (d) of the act (35 P. S. § 7311(c) and (d)):

(1) May not include requirements for the posting of a penalty bond.

(2) May restrict the use of the information to the medical or other occupational health services to the exposed person.

(3) May prohibit the disclosure of the information to anyone who has not entered into a similar agreement with the consent of the person claiming the trade secret.

(4) May provide for appropriate legal remedies in the event of a breach of the agreement.

**§ 317.4. Penalties for disclosure of confidential information.**

(a) An officer or employe of the Commonwealth, contractor to the Commonwealth, physician or employe of a county health department, local fire department or local police department who has access to confidential information and who willingly or knowingly discloses the confidential information to a person not authorized to receive it shall, upon conviction thereof, be guilty of a misdemeanor of the third degree.

(b) The person or institution which discloses the confidential information is liable for damages to the full extent of those damages.

(c) Violation of this section is *prima facie* evidence of trespass under Commonwealth common law.

**§ 317.5. Protection of confidential information certified by Federal officials.**

Information certified by appropriate officials of the Federal government as "necessarily kept secret" for national defense purposes shall be accorded the full protection against disclosure, as specified by the officials or under Federal statutes.

**§ 317.6. Construction of chapter.**

This chapter shall be construed in conjunction with an adjudication by other forums that the trade secret claim is a trade secret. In considering claims for trade secrets, the Department will give consideration to a trade secret designation made by another appropriate entity, such as a government agency, board or commission, court or other legal entity empowered to make determinations.



[Next page is 319-1.]

317-6

**CHAPTER 319. PROTECTION OF EMPLOYEES**

Sec.

- 319.1. Purpose and scope.
- 319.2. Prohibition of discharge or discipline.
- 319.3. Burden of proof.
- 319.4. Waiver of rights prohibition.

**§ 319.1. Purpose and scope.**

This chapter implements the protection of employe requirements under section 13 of the act (35 P. S. § 7313) and governs the authority of employes to exercise their rights under the act.

**§ 319.2. Prohibition of discharge or discipline.**

(a) No nonmanufacturing employer may discharge or cause to be discharged, or otherwise discipline or discriminate against an employe because the employe has done one of the following:

- (1) Filed a complaint.
- (2) Assisted the Department with respect to an inspection under section 14 of the act (35 P. S. § 7314) and Chapter 321 (relating to enforcement procedures and penalties).
- (3) Instituted or caused to be instituted a proceeding under or related to the act and this part.
- (4) Testified or is about to testify in a proceeding under or related to the act and this part.
- (5) Requested information or properly refused to work with the specific hazardous substance under section 5 of the act (35 P. S. § 7305) and Chapter 307 (relating to Material Safety Data Sheet (MSDS)).
- (6) Exercised a right afforded under the act and this part.

(b) The protections against discharge or discrimination contained in subsection (a) do not apply to a nonmanufacturing employe who, in taking any of the activities outlined in this subsection, has been found to have violated any of the following statutes:

- (1) 42 Pa.C.S. § 8351 (relating to wrongful use of civil proceedings).
- (2) 18 Pa.C.S. § 4902 (relating to perjury).
- (3) 18 Pa.C.S. § 4903 (relating to false swearing).
- (4) 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

319-1

(5) 18 Pa.C.S. § 4906 (relating to false reports to law enforcement authorities).

(6) 18 Pa.C.S. § 4909 (relating to witness or informant taking bribe).

(7) 18 Pa.C.S. § 4910 (relating to tampering with or fabricating physical evidence).

(8) 18 Pa.C.S. § 4911 (relating to tampering with public records or information).

(9) 18 Pa.C.S. § 4952 (relating to intimidation of witnesses or victims).

(10) 18 Pa.C.S. § 4953 (relating to retaliation against witnesses or victims).

(c) Where appropriate, the Department will postpone taking action under this section if enforcement actions under other statutes designed to prevent similar discrimination have been commenced and would remedy alleged violations of this chapter.

**§ 319.3. Burden of proof.**

If the Department or the employe establishes that within the 6 months prior to the alleged violation, the employe exercised a right provided in the act, the nonmanufacturing employer shall have the burden to show just cause for the employer's action by clear and convincing evidence in a proceeding brought under Chapter 321 (relating to enforcement procedures and penalties). For purposes of this section, just cause is substantial evidence that the employer's action would have been taken regardless of whether the employe exercised rights under the act.

**§ 319.4. Waiver of rights prohibition.**

(a) A waiver by an employe or applicant for employment of the benefits or requirements of the act and this part shall be against public policy and shall be void.

(b) A nonmanufacturing employer's request or requirement that an employe waive rights under the act as a condition of employment shall constitute a violation of section 13 of the act (35 P. S. § 7313) and this chapter.

**CHAPTER 321. ENFORCEMENT PROCEDURES AND PENALTIES**

Sec.

- 321.1. Purpose and scope.
- 321.2. Complaint and investigation procedure.
- 321.3. Issuance and content of order.
- 321.4. Determination of penalty amount.
- 321.5. Hearings.
- 321.6. Preliminary relief.
- 321.7. Interference with inspection.
- 321.8. Judicial review and enforcement.
- 321.9. False statements and intentional omissions.

**Cross References**

This chapter cited in 34 Pa. Code § 319.2 (relating to prohibition of discharge or discipline); and 34 Pa. Code § 319.3 (relating to burden of proof).

**§ 321.1. Purpose and scope.**

The purpose of this chapter is to implement the complaint and investigation procedures, civil penalties assessment, judicial review and enforcement requirements set forth in sections 14, 15 and 16 of the act (35 P. S. §§ 7314—7316).

**§ 321.2. Complaint and investigation procedure.**

(a) A person who believes there is a violation by an employer or supplier of the act or this part may file a complaint, within 180 days of the violation, with the Department. The complaint shall be in writing, verified and shall set forth the grounds for the complaint. Upon request of the complainant, the complainant's identity may not be revealed. The identity of the complaining party will be disclosed if, in the course of attempting to prove the existence of a violation, the complaining party testifies or if a court orders disclosure.

(b) Within 30 days after receipt of the complaint, the Department will notify the respondent in writing and permit the respondent to demonstrate compliance under the act.

(c) If compliance has not been demonstrated by clear and convincing evidence within 14 days of the mailing of the notification, and if the facts in controversy are susceptible to verification by inspection, a representative of the Department will:

- (1) Inspect, at reasonable times, the employer's workplace and conditions relevant to the complaint.

(2) In a reasonable manner, make additional investigation considered necessary for a determination of the employer's or supplier's compliance with the act.

(d) Whenever a representative of the Department proceeding under this section is denied admission to a place of employment, the representative may obtain a warrant to make an inspection of the place of employment from the appropriate judicial authority upon a showing of the following:

(1) That the individual seeking the warrant is an authorized agent of the Department.

(2) That the individual has established, under oath, that the place of employment to be investigated under this section is to be inspected to determine compliance with the requirements of the act and this part.

(e) Upon application to the appropriate judicial authority, and upon good cause shown, the Department may obtain an inspection warrant prior to the 14-day period set forth in subsection (c) and prior to a refusal by respondent to voluntarily admit a representative of the Department.

#### Cross References

This section cited in 34 Pa. Code § 305.2 (relating to maintenance and disclosure of Hazardous Substance Survey Forms); 34 Pa. Code § 305.6 (relating to public access); and 34 Pa. Code § 307.15 (relating to public access).

### § 321.3. Issuance and content of order.

If, upon investigation of a complaint, the Department finds that a respondent has violated the act or this part, within 7 days it will issue to the respondent an order to comply. This order will be in writing, specifically describe the nature of the violation and state a reasonable time period, not to exceed 90 days, within which the violation shall be corrected by the employer. The order shall contain other information that the Department will require.

### § 321.4. Determination of penalty amount.

(a) *Power of assessment.* The Department has the authority to assess civil penalties from \$500 to \$10,000 for each violation of the act, unless a greater amount is specified elsewhere in the act, giving consideration to the appropriateness of the penalty with respect to the size of the business of the employer being charged, the gravity of the violation, the good faith of the respondent and the history of previous violations. The amount of the civil penalty shall be based upon the point-system formula set forth in this section.

(b) *Calculation of penalties.* Four criteria will be used to determine the penalty amount. The criterion will be assigned points under the schedule in paragraph (1):

(1) *Size of business.* This criterion will take into consideration the number of employees on the date of the violations who are regularly assigned to the workplace where the violation occurred. A maximum of 25 points may be assigned to this criterion under the following:

<i>Number of employees</i>	<i>Points</i>
1 to 9	5
10 to 19	10
20 to 29	15
30 to 49	20
more than 50	25

(2) *Gravity of violation.* The criteria will be based upon two factors—the type of information which appropriate persons are not able to obtain under the act, and the extent to which the information is not provided. A factor may be assigned points under the schedule in this paragraph. Total points may not exceed 25 for both factors combined.

(i) The type of information involved in the violation:

<i>Type of Information</i>	<i>Points</i>
Material Safety Data Sheets	1-5
Labels	1-5
Notice of Employees Rights	5-10
Training	5-10
Any List of Hazardous Substances	5-10

(ii) Extent to which information is not provided:

<i>Information</i>	<i>Points</i>
Not prepared	5-15
Incomplete	1-5
Inaccurate	1-10
Out-of-Date	1-5
Prepared but Not Accessible	5-15

(3) *History of previous violations.* This criterion shall be based on the number of assessed violations in the subject workplace in a preceding 12 month period. Only violations for which penalties are paid and which are not subject to further appeal may be included. These criteria may account for up to 25 penalty points:

*Number of violations in the subject workplace over preceding 12-month period*

	<i>Points</i>
0-5	0
6-10	5
11-15	10
Over 15	25

(4) *Good faith of respondent.* This criteria may be used to reduce the point calculation, based upon credits given for the respondent's good faith in abating the violation and will result in a reduction of total penalty points as follows:

	<i>Points</i>
Abate the violation within 1 working day of receipt of an order to comply.	25
Abate the violation within the time given in the order to comply, without extensions.	20
Abate the violation within the time period given in the order to comply, with extensions.	15

(c) *Determination of penalty.*

(1) The net total penalty points will be applied to the following penalty schedule to determine the penalty:

<i>Points</i>	<i>Penalty</i>
0-25	\$0
26	\$500

(2) For each penalty point from 27 to 75, \$194 may be added to the penalty. A penalty calculated under this section may not exceed \$10,000.

(d) *Special assessments.*

(1) If the violation has not been abated within the time period provided for in an order to comply, the Department may levy a further civil penalty of not more than \$5,000 per day for a violation.

(2) If the employer fails to abate a violation for which no penalty has been assessed, the Department may assess a civil penalty of \$500.

(3) If the employer fails to abate a violation for which a penalty has been assessed, the Department may assess a daily civil penalty equal to the amount calculated under the penalty system, but not to exceed \$5,000 per day.

(e) *Director responsibilities.* Penalty assessments will be determined initially by the Director or a designee.

(1) The penalty assessment may not be determined by the inspector who issued the order containing the violation being assessed; however, the inspector may provide information regarding the criteria upon which the penalty is assessed.

(2) The Director may conduct informal conferences with the parties prior to a formal review under this chapter.

(f) *Waiver of point system.* The Director has the authority to waive application of the point system for good cause shown.

**§ 321.5. Hearings.**

(a) The respondent may, in writing, request the Department to provide a hearing concerning orders to comply or penalties levied upon the employer under this chapter within 30 days of the respondent's receipt of the notice. The request shall be filed as a petition under 1 Pa. Code § 35.17 (relating to petitions generally).

(b) The hearing will be held under 2 Pa.C.S. §§ 501—508 and 701—704 (relating to Administrative Agency Law), and 1 Pa. Code Part II (relating to general rules of administrative practice and procedure).

(c) After the hearing, the Department will affirm, reverse or modify its original determination.

(d) The validity of an order underlying a penalty assessment may be an issue in a hearing on the penalty assessment conducted under subsection (a), whether or not a request for a hearing on the order was previously sought.

**§ 321.6. Preliminary relief.**

(a) If the Department determines that reasonable cause exists to believe a violation has occurred, and that the violation may present an imminent danger to an employe or member of the public, the Department will seek a preliminary or special injunction in the appropriate court of common pleas.

(b) The courts of common pleas are empowered to and shall issue injunctive relief upon a *prima facie* showing by the Department of a violation and a showing by a preponderance of the evidence that an imminent danger situation is present.



**§ 321.7. Interference with inspection.**

(a) An employer or individual who wilfully impedes an authorized representative of the Department from carrying out an investigation or inspection under the act or this part or who refuses entry to an authorized representative of the Department to a workplace where the inspection is authorized by a warrant shall be assessed a civil penalty of not more than \$1,000.

(b) A person who gives advance notice of an inspection to be conducted under the act without authority from the Department shall be assessed a civil penalty of not more than \$1,000.

**§ 321.8. Judicial review and enforcement.****(a) Appellate review.**

(1) A person aggrieved by a final determination of the Department under sections 11 and 14 of the act (35 P. S. §§ 7311 and 7314) may file a petition for review within 30 days of determination in Commonwealth Court, 42 Pa.C.S. § 763(a) (relating to direct appeals from government agencies).

(2) The decision of the Department may not be reversed or modified, unless the decision is found to be arbitrary, capricious, illegal or not supported by substantial evidence.

**(b) Original action.**

(1) An aggrieved person may bring a civil action in the appropriate court of common pleas on his own behalf against an employer or supplier for a violation of the act, except section 11 of the act (35 P. S. § 7311), or Chapter 317 (relating to trade secrets) or may bring suit in Commonwealth Court against the Department for failure to enforce the act or this part.

(2) Where the action involves the rights of more than one employe, a certified or recognized collective-bargaining representative has standing to sue on behalf of the employes.

(3) The court may issue, whenever it deems appropriate, a preliminary, permanent or special injunction.

(4) Under no circumstances may the act or this part be construed to require, and under no circumstances may a court award compensatory and liquidated damages, costs and expenses of litigation, including expert witness fees and reasonable attorney fees.

**§ 321.9. False statements and intentional omissions.**

(a) A person who knowingly makes a false statement, representation or certification in a list, record or other document required to be maintained under the act or this part or who intentionally or deliberately refrains from complying with the act shall be assessed a civil penalty of not more than \$10,000 or shall be guilty of a criminal offense classed as a misdemeanor of the first degree, or both.

(b) An employer or supplier who wilfully or recklessly prepares an MSDS for the purpose of withholding or falsifying relevant information concerning the nature and severity of the hazardous nature of the substance shall be assessed a civil penalty of not more than \$10,000 or shall be guilty of a criminal offense classed as a misdemeanor of the first degree, or both.

[Next page is 323-1.]

321-8

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**CHAPTER 323. HAZARDOUS SUBSTANCE LIST**

Sec.

- 323.1. General.
- 323.2. Special hazardous substances.
- 323.3. Environmental hazards.
- 323.4. Additions and deletions to the Hazardous Substance List.
- 323.5. Automatic additions to Hazardous Substance List.
- 323.6. On-site testing of environmental hazards.

**§ 323.1. General.**

Under section 3 of the act (35 P. S. § 7303), the Department adopts a Hazardous Substance List as set forth in Appendix A.

**§ 323.2. Special hazardous substances.**

(a) Hazardous substances which are considered special hazardous substances because their particular toxicity, tumorigenicity, mutagenicity, reproductive toxicity, flammability, explosivity, corrosivity or reactivity pose a special hazard to health and safety. Only substances on the Hazardous Substance List in Appendix A which have the letter "S" are part of the Special Hazardous Substance List.

(b) The Department will evaluate the appropriateness of designing hazardous substances as special hazardous substances based on the following criteria:

(1) The substance shall be one which is on the Department's Hazardous Substance List.

(2) The hazardous substance when present at concentrations of less than 1.0%, but greater than .01%, shall pose a special hazard to health and safety due to its toxicity, tumorigenicity, mutagenicity, reproductive toxicity, flammability, explosiveness, corrosivity or reactivity.

(3) Reliable, current and accurate scientific evidence shall demonstrate the elements of paragraph (2).

(c) A person may submit relevant scientific information to assist the Department in making its determination.

**§ 323.3. Environmental hazards.**

(a) Hazardous substances which are considered environmental hazards because of their particular or extreme properties pose a danger if released into the environment are contained in an Environmental Hazard List.

Only substances on the Hazardous Substance List in Appendix A which have the letter "E" are part of the Environmental Hazard List.

(b) The Department will evaluate the appropriateness of designating hazardous substances as environmental hazards based on the following criteria:

- (1) The substance shall be one which is on the Department's Hazardous Substance List.
- (2) The substance shall be regulated under Federal, State, county or municipal environmental statutes.
- (3) The substance shall pose a danger if released into the environment in that it shall be considered toxic, hazardous or it shall be a contaminant subject to Statewide standards for emissions or discharges under current environmental statutes regulating the substance.

**§ 323.4. Additions and deletions to the Hazardous Substance List.**

Except as provided by § 323.5 (relating to automatic additions to Hazardous Substance List), the Department will add or delete substances from the list contained in Appendix A only following public notice, hearings and publication of a rulemaking under the act of July 31, 1968 (P. L. 769, No. 240) (45 P. S. §§ 1102, 1201—1208 and 1602) and 45 Pa.C.S. Part II (relating to publication and effectiveness of Commonwealth documents).

**Cross References**

This section cited in 34 Pa. Code § 323.5 (relating to automatic additions to Hazardous Substance List).

**§ 323.5. Automatic additions to Hazardous Substance List.**

(a) Chemicals not listed in Appendix A which appear in future compilations or issues of the following lists will automatically be added to the Hazardous Substance List in Appendix A upon publication of a notice of the automatic additions in the *Pennsylvania Bulletin*.

- (1) Federal Environmental Protection Agency (EPA) list of toxic pollutants and hazardous substances prepared under sections 307 and 311 of the Federal Clean Water Act of 1977 (33 U.S.C.A. §§ 1317 and 1321).
- (2) EPA list of hazardous air pollutants prepared under section 112 of the Federal Clean Air Act (42 U.S.C.A. § 7412).

(3) EPA list of restricted use of pesticides found at 40 CFR 162.30 (relating to optional procedures for classification of pesticide uses by regulation).

(4) EPA Carcinogen Assessment Group's List of Carcinogens.

(5) OSHA list of toxic and hazardous substances found in 29 CFR Part 1910, Subpart Z (relating to toxic and hazardous substances).

(6) International Agency for Research on Cancer sublist, entitled "Sufficient Evidence of Carcinogenicity in Animals."

(7) National Toxicology Program's list of substances published in their latest Annual Report on Carcinogens.

(8) National Fire Protection Association list found in "Hazardous Chemicals Data (NFPA 49)."

(9) National Fire Protection Association list found in "Fire Hazard Properties of Flammable Liquids, Gases, Volatile Solids (NFPA 325M)," but only substances found on sublists for health items, categories 2, 3 and 4; sublist for reactivity items, categories 3 and 4; and sublists for flammability, categories 3 and 4.

(10) American Conference of Governmental Hygienists list found in "Threshold Limit Value for Chemical Substances and Physical Agents in the Workplace."

(11) National Cancer Institute sublist, entitled "Carcinogens Bioassays with at Least Evidence Suggestive of Carcinogenic Effect," but including only substances which satisfy criteria of the National Toxicology Program indicating significant carcinogenic effect.

(b) The Department will annually submit to the Legislative Reference Bureau for recommended publication as a notice in the *Pennsylvania Bulletin* a recompilation of Appendix A, containing additions and deletions made under § 323.4 (relating to additions and deletions to the Hazardous Substance List) and this section.

#### Cross References

This section cited in 34 Pa. Code § 323.4 (relating to additions and deletions to the Hazardous Substance List).

#### § 323.6. On-site testing of environmental hazards.

(a) The Department may conduct, at its own expense and for good cause shown, on-site testing for environmental hazards or use other methods that will provide more exact information concerning the environmental hazards reported in the Environmental Hazard Survey under

section 3(g) of the act (35 P. S. § 7303(g)). The action will be considered by the Department upon receipt of a written request which contains the following information:

- (1) The name and address of the requesting party.
- (2) A reasonable description or name of substances requested to be tested.
- (3) The specific reasons why the requested testing is desired.
- (4) The name, address and location of the company and workplace or work area where the testing is requested to be conducted.
- (5) The efforts made to obtain the information sought through the testing.
- (6) Additional information the Department considers pertinent to the request.

(b) Interested parties for purposes of consultation with respect to a request for on-site testing include the following:

- (1) The employer responsible for completing the Environmental Hazard Survey for the workplace for which testing is required.
- (2) The party requesting the on-site testing.
- (3) Other parties that the Department may consider, in its discretion, to have an appropriate interest in the testing request.

(c) The workplace employer or site owner may conduct on-site testing instead of the Department. Upon the written request of the owner or employer, the Department will detail, in writing, the type and methods of testing and provide technical assistance to aid the owner or employer which chooses to conduct testing instead of the Department.

(d) In an emergency, the Department may undertake testing at the Commonwealth's expense. The Department, at its discretion, will determine situations which constitute emergencies for purposes of this section.

(e) The Department may not conduct on-site testing which has already been conducted by the OSHA, the Department of Environmental Resources or the Mine Safety Health Administration.

#### Cross References

This section cited in 34 Pa. Code § 301.3 (relating to jurisdiction/exemptions).

## APPENDIX A—HAZARDOUS SUBSTANCE LISTS

*ES	CAS NO.	SUBSTANCE NAME
	57-50-1	.ALPHA.-D-GLUCOPYRANOSIDE, BETA.-D-FRUCTOFURANOSYL
ES	14901-08-7	.BETA.-D-GLUCOPYRANOSIDE, (METHYL-ONN-AZOXY)METHYL
	90-41-5	[1,1'-BIPHENYL]-2-AMINE
ES	92-67-1	[1,1'-BIPHENYL]-4-AMINE
	92-04-6	[1,1'-BIPHENYL]-4-OL, 3-CHLORO-
ES	92-87-5	[1,1'-BIPHENYL]-4,4'-DIAMINE
ES	91-94-1	[1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DICHLORO-
ES	119-90-4	[1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DIMETHOXY-
ES	119-93-7	[1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DIMETHYL-
	83-79-4	[1]BENZOPYRANO[3,4-B]FURO[2,3-H][1]BENZOPYRAN-4(6A-H)-ONE, 1,2,12,12A-TETRAHYDRO-8,9-DIMETHOXY-2-(1-METHYLETHENYL)-, [2R-(2.ALPHA.,6A.ALPHA.,12A.ALHA.)]-
E	208-96-8	ACENAPHTHYLENE
E	83-32-9	ACENAPHTHYLENE, 1,2-DIHYDRO-
S	602-87-9	ACENAPHTHYLENE, 1,2-DIHYDRO-5-NITRO-
E	75-07-0	ACETALDEHYDE
E	107-20-0	ACETALDEHYDE, CHLORO-
E	9002-91-9	ACETALDEHYDE, HOMOPOLYMER
E	75-87-6	ACETALDEHYDE, TRICHLORO-
E	60-35-5	ACETAMIDE
E	591-08-2	ACETAMIDE, N-(AMINOTHIOXOMETHYL)-
ES	62-44-2	ACETAMIDE, N-(4-ETHOXYPHENYL)-
	103-89-9	ACETAMIDE, N-(4-METHYLPHENYL)-
S	531-82-8	ACETAMIDE, N-[4-(5-NITRO-2-FURANYL)-2-THIAZOLYL]-
	1119-49-9	ACETAMIDE, N-BUTYL-
	91-49-6	ACETAMIDE, N-BUTYL-N-PHENYL-
	103-84-4	ACETAMIDE, N-PHENYL-
	28314-03-6	ACETAMIDE, N-9H-FLUOREN-1-YL-
ES	53-96-3	ACETAMIDE, N-9H-FLUOREN-2-YL-
	127-19-5	ACETAMIDE, N,N-DIMETHYL-
S	613-35-4	ACETAMIDE, N,N'-[1,1'-BIPHENYL]-4,4'-DIYLBIS-
E	640-19-7	ACETAMIDE, 2-FLUORO-
S	56-75-7	ACETAMIDE, 2,2-DICHLORO-N-[2-HYDROXY-1-(HYDROXYMETHYL)- 2-(4-NITROPHENYL)ETHYL], [R-(R*,R*)]-
E	64-19-7	ACETIC ACID
E	108-05-4	ACETIC ACID ETHENYL ESTER
E	141-78-6	ACETIC ACID ETHYL ESTER
E	94-75-7	ACETIC ACID, (2,4-DICHLOROPHENOXY)-
E	94-80-4	ACETIC ACID, (2,4-DICHLOROPHENOXY)-, BUTYL ESTER
E	25168-26-7	ACETIC ACID, (2,4-DICHLOROPHENOXY)-, ISOCTYL ESTER
E	1928-38-7	ACETIC ACID, (2,4-DICHLOROPHENOXY)-, METHYL ESTER
E	1928-61-6	ACETIC ACID, (2,4-DICHLOROPHENOXY)-, PROPYL ESTER
E	94-11-1	ACETIC ACID, (2,4-DICHLOROPHENOXY)-, 1-METHYLETHYL ESTER
E	94-79-1	ACETIC ACID, (2,4-DICHLOROPHENOXY)-, 1-METHYLPROPYL ESTER
E	1929-73-3	ACETIC ACID, (2,4-DICHLOROPHENOXY)-, 2-BUTOXYETHYL ESTER
E	1320-18-9	ACETIC ACID, (2,4-DICHLOROPHENOXY)-, 2-BUTOXYMETHYLETHYL ESTER
E	2971-38-2	ACETIC ACID, (2,4-DICHLOROPHENOXY)-, 4-CHLORO-2-BUTENYLESTER
E	93-76-5	ACETIC ACID, (2,4,5-TRICHLOROPHENOXY)-
E	93-79-8	ACETIC ACID, (2,4,5-TRICHLOROPHENOXY)-, BUTYL ESTER
E	6369-97-7	ACETIC ACID, (2,4,5-TRICHLOROPHENOXY)-, COMPD. WITH N-METHYLMETHANAMINE (1:1)
E	6369-96-6	ACETIC ACID, (2,4,5-TRICHLOROPHENOXY)-, COMPD. WITH N,N-DIMETHYLMETHANAMINE (1:1)
E	1319-72-8	ACETIC ACID, (2,4,5-TRICHLOROPHENOXY)-, COMPD. WITH 1-AMINO-2-PROPANOL (1:1)
E	3813-14-7	ACETIC ACID, (2,4,5-TRICHLOROPHENOXY)-, COMPD. WITH 2,2',2''-NITRILOTRIS[ETHANOL] (1:1)
E	13560-99-1	ACETIC ACID, (2,4,5-TRICHLOROPHENOXY)-, SODIUM SALT
E	2345-59-7	ACETIC ACID, (2,4,5-TRICHLOROPHENOXY)-, 2-BUTOXYETHYL ESTER
E	631-61-8	ACETIC ACID, AMMONIUM SALT

\*—ANY COMPOUND OF THIS SUBSTANCE  
IS ALSO AN ENVIRONMENTAL HAZARD  
E—ENVIRONMENTAL HAZARD  
S—SPECIAL HAZARDOUS SUBSTANCE



*ES	CAS NO.	SUBSTANCE NAME
E	108-24-7	ACETIC ACID, ANHYDRIDE
E	123-86-4	ACETIC ACID, BUTYL ESTER
E	543-90-8	ACETIC ACID, CADMIUM SALT
E	79-11-8	ACETIC ACID, CHLORO-
	105-39-5	ACETIC ACID, CHLORO-, ETHYL ESTER
	96-34-4	ACETIC ACID, CHLORO-, METHYL ESTER
E	1066-30-4	ACETIC ACID, CHROMIUM(3+) SALT
E	142-71-2	ACETIC ACID, COPPER(2+) SALT
	372-09-8	ACETIC ACID, CYANO-
	105-56-6	ACETIC ACID, CYANO-, ETHYL ESTER
E	62-74-8	ACETIC ACID, FLUORO-, SODIUM SALT
ES	301-04-2	ACETIC ACID, LEAD(2+) SALT
	68-11-1	ACETIC ACID, MERCAPTO-
	123-81-9	ACETIC ACID, MERCAPTO-, 1,2-ETHANEDIYL ESTER
	79-20-9	ACETIC ACID, METHYL ESTER
	112-14-1	ACETIC ACID, OXYL ESTER
E	628-63-7	ACETIC ACID, PENTYL ESTER
	109-60-4	ACETIC ACID, PROPYL ESTER
E	53496-15-4	ACETIC ACID, SEC-PENTYL ESTER
E	563-68-8	ACETIC ACID, THALLIUM(I) SALT
	76-03-9	ACETIC ACID, TRICHLORO-
E		ACETIC ACID, WATER SOLUTIONS
E	557-34-6	ACETIC ACID, ZINC SALT
	108-21-4	ACETIC ACID, 1-METHYLETHYL ESTER
	105-46-4	ACETIC ACID, 1-METHYLPROPYL ESTER
E	540-88-5	ACETIC ACID, 1,1-DIMETHYLETHYL ESTER
	10031-87-5	ACETIC ACID, 2-ETHYLBUTYL ESTER
	103-09-3	ACETIC ACID, 2-ETHYLHEXYL ESTER
E	110-19-0	ACETIC ACID, 2-METHYLPROPYL ESTER
	591-87-7	ACETIC ACID, 2-PROPENYL ESTER
	93-68-5	ACETOACET-ORTHO-TOLUIDIDE
E	1752-30-3	ACETONE THIOSEMICARBAZIDE
E	75-05-8	ACETONITRILE
E	506-96-7	ACETYL BROMIDE
E	75-36-5	ACETYL CHLORIDE
	79-04-9	ACETYL CHLORIDE, CHLORO-
	79-36-7	ACETYL CHLORIDE, DICHLORO-
E	814-68-6	ACRYLYL CHLORIDE
S	50-76-0	ACTINOMYCIN D
S	51004-61-6	AF 2 (FOAMING AGENT)
ES	1402-68-2	AFLATOXINS
E		ALLYL PROPENYL
E	122-09-8	ALPHA, ALPHA-DIMETHYLPHENETHYLAMINE
		ALPHA, BETA-GLYCERIN DICHLOROHYDRIN
E	16853-85-3	ALUMINATE(1-), TETRAHYDRO-, LITHIUM, (T-4)-
	7429-90-5	ALUMINUM
		ALUMINUM ALKYL
	7446-70-0	ALUMINUM CHLORIDE (ALCL3)
		ALUMINUM DUST
E	1344-28-1	ALUMINUM OXIDE (AL2O3)
E	20859-73-8	ALUMINUM PHOSPHIDE (ALP)
S		ALUMINUM PRODUCTION
		ALUMINUM PYRO POWDERS
		ALUMINUM SOLUBLE SALTS
		ALUMINUM WELDING FUMES
	96-10-6	ALUMINUM, CHLORODIETHYL-
	563-43-9	ALUMINUM, DICHLOROETHYL-
	871-27-2	ALUMINUM, DIETHYLHYDRO-
	1191-15-7	ALUMINUM, HYDROBIS(2-METHYLPROPYL)-
	2036-15-9	ALUMINUM, HYDRODIPROPYL-
	12263-85-3	ALUMINUM, TRIBROMOTRIMETHYLDI-
	1116-70-7	ALUMINUM, TRIBUTYL-
	12075-68-2	ALUMINUM, TRICHLOROTRIETHYLDI-
	12542-85-7	ALUMINUM, TRICHLOROTRIETHYLDI-
	97-93-8	ALUMINUM, TRIETHYL-

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*ES	CAS NO.	SUBSTANCE NAME
	75-24-1	ALUMINUM, TRIMETHYL-
	102-67-0	ALUMINUM, TRIPROPYL-
	100-99-2	ALUMINUM, TRIS(2-METHYLPROPYL)-
E	54-62-6	AMINOPTERIN
E	78-53-5	AMITON
E	3734-97-2	AMITON OXALATE
E	7664-41-7	AMMONIA
	12124-97-9	AMMONIUM BROMIDE ((NH <sub>4</sub> )BR)
E	12125-02-9	AMMONIUM CHLORIDE ((NH <sub>4</sub> )CL)
E	1341-49-7	AMMONIUM FLUORIDE ((NH <sub>4</sub> )HF <sub>2</sub> )
E	12125-01-8	AMMONIUM FLUORIDE ((NH <sub>4</sub> )F)
E	1336-21-6	AMMONIUM HYDROXIDE ((NH <sub>4</sub> )OH)
E	131-74-8	AMMONIUM PICRATE
E	12135-76-1	AMMONIUM SULFIDE ((NH <sub>4</sub> ) <sub>2</sub> S)
E	14307-43-8	AMMONIUM TARTRATE
E	7803-55-6	AMMONIUM VANADATE
E	52628-25-8	AMMONIUM ZINC CHLORIDE
E	300-62-9	AMPHETAMINE
S		ANALGESIC MIXTURES CONTAINING PHENACETIN
	1317-70-0	ANATASE (TiO <sub>2</sub> )
S	58-22-0	ANDROST-4-EN-3-ONE, 17-HYDROXY-, (17. BETA.)-
S	434-07-1	ANDROSTAN-3-ONE, 17-HYDROXY-2-(HYDROXYMETHYLENE)-17-METHYL-, (5. ALPHA., 17. BETA.)-
E	88-05-1	ANILINE, 2,4,6-TRIMETHYL-
S		ANTHOPHYLLITE
E	120-12-7	ANTHRACENE
S		ANTHRACENE OILS (COAL TAR DERIVED PRODUCT)
E	28300-74-5	ANTIMONATE(2-), BIS[MU-(2,3-DIHYDROXYBUTANEDIOATO(4-)-O1,O2-O3,O4)]DI-, DIPOTASSIUM, TRIHYDRATE, STEREOISOMER
*E	7440-36-0	ANTIMONY
E	7647-18-9	ANTIMONY CHLORIDE (SbCl <sub>3</sub> )
E	7783-70-2	ANTIMONY FLUORIDE (SbF <sub>3</sub> )
E	1309-64-4	ANTIMONY OXIDE (Sb <sub>2</sub> O <sub>3</sub> )
E	1315-04-4	ANTIMONY SULFIDE (Sb <sub>2</sub> S <sub>3</sub> )
E	1397-94-0	ANTIMYCN A
E	7440-37-1	ARGON
E	88-01-9	AROCLOR
E	12674-11-2	AROCLOR 1016
E	11104-38-2	AROCLOR 1221
E	11141-16-5	AROCLOR 1232
E	53469-21-9	AROCLOR 1242
E	12672-29-6	AROCLOR 1248
ES	11097-69-1	AROCLOR 1254
ES	11096-82-5	AROCLOR 1260
*ES	7440-38-2	ARSENIC
E	7778-39-4	ARSENIC ACID
E	1327-52-2	ARSENIC ACID
E	7778-44-1	ARSENIC ACID (H <sub>3</sub> AsO <sub>4</sub> ), CALCIUM SALT (2:3)
E	7645-25-2	ARSENIC ACID (H <sub>3</sub> AsO <sub>4</sub> ), LEAD SALT
E	7784-40-9	ARSENIC ACID (H <sub>3</sub> AsO <sub>4</sub> ), LEAD(2+) SALT (1:1)
E	10102-48-4	ARSENIC ACID (H <sub>3</sub> AsO <sub>4</sub> ), LEAD(4+) SALT (3:2)
ES	7784-41-0	ARSENIC ACID (H <sub>3</sub> AsO <sub>4</sub> ), MONOPOTASSIUM SALT
ES	7631-89-2	ARSENIC ACID (H <sub>3</sub> AsO <sub>4</sub> ), SODIUM SALT
E	1303-32-8	ARSENIC DISULFIDE
ES	1327-53-3	ARSENIC OXIDE (AS <sub>2</sub> O <sub>3</sub> )
ES	1303-28-2	ARSENIC OXIDE (AS <sub>2</sub> O <sub>3</sub> )
E	1303-33-9	ARSENIC SULFIDE (AS <sub>2</sub> S <sub>3</sub> )
ES	13464-37-4	ARSENIOUS ACID, TRISODIUM SALT
E	7784-34-1	ARSENIOUS TRICHLORIDE
E	7784-42-1	ARSINE
E	692-42-2	ARSINE, DIETHYL-
E	12044-79-0	ARSINO, THIOXO-
E	52740-16-6	ARSONIC ACID, CALCIUM SALT (1:1)
E	10124-50-2	ARSONIC ACID, POTASSIUM SALT

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E--ENVIRONMENTAL HAZARD  
S--SPECIAL HAZARDOUS SUBSTANCE

RIGHT-TO-KNOW

Pt. XIII

*ES	CAS NO.	SUBSTANCE NAME
ES	1332-21-4	ASBESTOS
ES	12172-73-5	ASBESTOS, GRUNERITE
	8052-42-4	ASPHALT
E	492-80-8	AURAMINE
S		AURAMINE MANUFACTURE
E	2642-71-9	AZINPHOS-ETHYL
E	151-56-4	AZIRIDINE
ES	52-24-4	AZIRIDINE, 1,1',1"-PHOSPHINOTHIOYLIDYNETRIS-
ES	75-55-8	AZIRIDINE, 2-METHYL-
ES	50-07-7	AZIRINO[2',3':3,4]PYRROLO[1,2-A]INDOLE-4,7-DIONE, 6-AMINO-8-[[[AMINOCARBONYLOXY]METHYL]-1,1A,2,8,8A,8B-HEXAHYDRO- 8A-METHOXY-5-METHYL-, [1AS-(1A.ALPHA.,8.BETA.,8A.ALPHA.,8B.ALPHA.)]-
*E	7440-39-3	BARIIUM
E	542-62-1	BARIIUM CYANIDE (BA(CN)2)
E	1304-29-6	BARIIUM PEROXIDE (BA(O2))
	7727-43-7	BARIIUM SULFATE
E	98-09-9	BENZENESULFONYL CHLORIDE
E	225-51-4	BENZICACRIDINE
ES	56-55-3	BENZ[A]ANTHRACENE
ES	57-97-6	BENZ[A]ANTHRACENE, 7,12-DIMETHYL-
E	51787-44-1	BENZ[C]ACRIDINE, 7,8,9,11-TETRAMETHYL-
ES	205-99-2	BENZ[E]ACEPHENANTHRYLENE
ES	56-49-5	BENZ[J]ACEANTHRYLENE, 1,2-DIHYDRO-3-METHYL-
E	98-87-3	BENZAL CHLORIDE
	100-52-7	BENZALDEHYDE
	135-02-4	BENZALDEHYDE, 2-METHOXY-
	104-88-1	BENZALDEHYDE, 4-CHLORO-
E	55-21-0	BENZAMIDE
S	671-16-9	BENZAMIDE, N-(1-METHYLETHYL)-4-[(2-METHYLHYDRAZINO)METHYL]-
S	366-70-1	BENZAMIDE, N-(1-METHYLETHYL)-4-[(2-METHYLHYDRAZINO)METHYL]-, MONOHYDROCHLORIDE
	148-01-6	BENZAMIDE, 2-METHYL-3,5-DINITRO-
E	23950-58-5	BENZAMIDE, 3,5-DICHLORO-N-(1,1-DIMETHYL-2-PROPYNYL)-
	1420-04-8	BENZAMIDE, 5-CHLORO-N-(2-CHLORO-4-NITROPHENYL)-2-HYDROXY-, COMPD. WITH 2-AMINOETHANOL (1:1)
E	62-53-3	BENZENAMINE
	29191-52-4	BENZENAMINE, AR-METHOXY-
	1300-73-8	BENZENAMINE, AR,AR-DIMETHYL-
	142-04-1	BENZENAMINE, HYDROCHLORIDE
	768-52-5	BENZENAMINE, N-(1-METHYLETHYL)-
	10137-80-1	BENZENAMINE, N-(2-ETHYLHEXYL)-
	1126-78-9	BENZENAMINE, N-BUTYL-
	103-69-5	BENZENAMINE, N-ETHYL-
ES	135-20-6	BENZENAMINE, N-HYDROXY-N-NITROSO-, AMMONIUM SALT
	100-61-8	BENZENAMINE, N-METHYL-
	479-45-8	BENZENAMINE, N-METHYL-N,2,4,6-TETRANITRO-
E	86-30-6	BENZENAMINE, N-NITROSO-N-PHENYL-
E	122-39-4	BENZENAMINE, N-PHENYL-
	613-29-6	BENZENAMINE, N,N-DIBUTYL-
	91-66-7	BENZENAMINE, N,N-DIETHYL-
E	121-69-7	BENZENAMINE, N,N-DIMETHYL-
ES	60-11-7	BENZENAMINE, N,N-DIMETHYL-4-(PHENYLAZO)-
	603-34-9	BENZENAMINE, N,N-DIPHENYL-
	94-70-2	BENZENAMINE, 2-ETHOXY-
ES	90-04-0	BENZENAMINE, 2-METHOXY-
ES	134-29-2	BENZENAMINE, 2-METHOXY-, HYDROCHLORIDE
ES	120-71-8	BENZENAMINE, 2-METHOXY-5-METHYL-
ES	99-59-2	BENZENAMINE, 2-METHOXY-5-NITRO-
ES	95-53-4	BENZENAMINE, 2-METHYL-
ES	636-21-5	BENZENAMINE, 2-METHYL-, HYDROCHLORIDE
ES	97-56-3	BENZENAMINE, 2-METHYL-4-[(2-METHYLPHENYL)AZO]-
E	99-55-8	BENZENAMINE, 2-METHYL-5-NITRO-
	87-59-2	BENZENAMINE, 2,3-DIMETHYL-
	97-02-9	BENZENAMINE, 2,4-DINITRO-
	102-56-7	BENZENAMINE, 2,5-DIMETHOXY-

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E--ENVIRONMENTAL HAZARD  
S--SPECIAL HAZARDOUS SUBSTANCE

Ch. 323 HAZARDOUS SUBSTANCE LIST

*ES	CAS NO.	SUBSTANCE NAME
E	87-62-7	BENZENAMINE, 2,6-DIMETHYL-
E	98-16-8	BENZENAMINE, 3-(TRIFLUOROMETHYL)-
	95-76-1	BENZENAMINE, 3,4-DICHLORO-
	2049-92-5	BENZENAMINE, 4-(1,1-DIMETHYLPROPYL)-
E	106-47-8	BENZENAMINE, 4-CHLORO-
S	95-69-2	BENZENAMINE, 4-CHLORO-2-METHYL-
E	3165-93-3	BENZENAMINE, 4-CHLORO-2-METHYL-, HYDROCHLORIDE
	156-43-4	BENZENAMINE, 4-ETHOXY-
S	13410-72-5	BENZENAMINE, 4-ETHOXY-N-[(5-NITRO-2-FURANYL)METHYLENE]-
E	104-94-9	BENZENAMINE, 4-METHOXY-
	106-49-0	BENZENAMINE, 4-METHYL-
	89-62-3	BENZENAMINE, 4-METHYL-2-NITRO-
E	100-01-6	BENZENAMINE, 4-NITRO-
ES	156-10-5	BENZENAMINE, 4-NITROSO-N-PHENYL-
ES	2465-27-2	BENZENAMINE, 4,4'-CARBONIMIDIOYL[BIS(N,N-DIMETHYL-, MONOHYDROCHLORIDE
E	101-77-9	BENZENAMINE, 4,4'-METHYLENEBIS-
ES	101-61-1	BENZENAMINE, 4,4'-METHYLENEBIS[N,N-DIMETHYL-
ES	101-14-4	BENZENAMINE, 4,4'-METHYLENEBIS[2-CHLORO-
S	838-88-0	BENZENAMINE, 4,4'-OXYBIS-
ES	101-80-4	BENZENAMINE, 4,4'-OXYBIS-
S	28434-86-8	BENZENAMINE, 4,4'-OXYBIS[2-CHLORO-
ES	139-65-1	BENZENAMINE, 4,4'-THIOBIS-
ES	71-43-2	BENZENE
E	100-44-7	BENZENE, (CHLOROMETHYL)-
	30030-25-2	BENZENE, (CHLOROMETHYL)ETHENYL-
ES	98-07-7	BENZENE, (TRICHLOROMETHYL)-
	98-08-8	BENZENE, (TRIFLUOROMETHYL)-
E	98-82-8	BENZENE, (1-METHYLETHYL)-
	135-98-8	BENZENE, (1-METHYLPROPYL)-
	98-06-6	BENZENE, (1,1-DIMETHYLETHYL)-
	6607-45-0	BENZENE, (1,2-DICHLOROETHENYL)-
	538-93-2	BENZENE, (2-METHYLPROPYL)-
	108-86-1	BENZENE, BROMO-
	104-51-8	BENZENE, BUTYL-
E	108-90-7	BENZENE, CHLORO-
	25567-67-3	BENZENE, CHLORODINITRO-
	25168-05-2	BENZENE, CHLOROMETHYL-
	25167-93-5	BENZENE, CHLORONITRO-
	827-52-1	BENZENE, CYCLOHEXYL-
	104-72-3	BENZENE, DECYL-
E	25321-22-6	BENZENE, DICHLORO-
	1321-74-0	BENZENE, DIETHENYL-
	1320-21-4	BENZENE, DIMETHYL(PENTYLOXY)-
E	1330-20-7	BENZENE, DIMETHYL-
E	25154-54-5	BENZENE, DINITRO-
E	100-42-5	BENZENE, ETHENYL-
	1319-73-9	BENZENE, ETHENYL-, MONOMETHYL DERIV.
	25013-15-4	BENZENE, ETHENYLMETHYL-
E	100-41-4	BENZENE, ETHYL-
	462-06-6	BENZENE, FLUORO-
ES	118-74-1	BENZENE, HEXACHLORO-
E	108-88-3	BENZENE, METHYL-
E	25321-14-6	BENZENE, METHYLDINITRO-
E	1321-12-6	BENZENE, METHYLNITRO-
	1320-01-0	BENZENE, METHYLPENTYL-
E	98-95-3	BENZENE, NITRO-
E	608-93-5	BENZENE, PENTACHLORO-
E	82-68-8	BENZENE, PENTACHLORONITRO-
	538-68-1	BENZENE, PENTYL-
	103-65-1	BENZENE, PROPYL-
	25551-13-7	BENZENE, TRIMETHYL-
	98-51-1	BENZENE, 1-(1,1-DIMETHYLETHYL)-4-METHYL-
	95-46-5	BENZENE, 1-BROMO-2-METHYL-
	106-38-7	BENZENE, 1-BROMO-4-METHYL-
E	101-55-3	BENZENE, 1-BROMO-4-PHENOXY-

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## RIGHT-TO-KNOW

Pt. XIII

*ES	CAS NO.	SUBSTANCE NAME
	88-16-4	BENZENE, 1-CHLORO-2-(TRIFLUOROMETHYL)-
	2039-87-4	BENZENE, 1-CHLORO-2-ETHENYL-
	95-49-8	BENZENE, 1-CHLORO-2-METHYL-
	88-73-3	BENZENE, 1-CHLORO-2-NITRO-
	97-00-7	BENZENE, 1-CHLORO-2,4-DINITRO-
	121-73-3	BENZENE, 1-CHLORO-3-NITRO-
	100-00-5	BENZENE, 1-CHLORO-4-NITRO-
	777-37-7	BENZENE, 1-CHLORO-4-NITRO-2-(TRIFLUOROMETHYL)-
E	7005-72-3	BENZENE, 1-CHLORO-4-PHENOXY-
E	88-72-2	BENZENE, 1-METHYL-2-NITRO-
E	121-14-2	BENZENE, 1-METHYL-2,4-DINITRO-
E	99-08-1	BENZENE, 1-METHYL-3-NITRO-
	99-87-6	BENZENE, 1-METHYL-4-(1-METHYLETHYL)-
E	99-99-0	BENZENE, 1-METHYL-4-NITRO-
E	72-55-9	BENZENE, 1,1'-(DICHLOROETHYLENEDIBIS[4-CHLORO-
	93-96-9	BENZENE, 1,1'-(OXYDIETHYLENEDIBIS[4-CHLORO-
E	72-54-8	BENZENE, 1,1'-(2,2-DICHLOROETHYLENEDIBIS[4-CHLORO-
ES	50-29-3	BENZENE, 1,1'-(2,2,2-TRICHLOROETHYLENEDIBIS[4-CHLORO-
E	72-43-5	BENZENE, 1,1'-(2,2,2-TRICHLOROETHYLENEDIBIS[4-METHOXY-
E	101-68-8	BENZENE, 1,1'-METHYLENEDIBIS[4-ISOCYANATO-
	101-84-8	BENZENE, 1,1'-OXYBIS-
E	95-50-1	BENZENE, 1,2-DICHLORO-
	135-01-3	BENZENE, 1,2-DIETHYL-
E	95-47-6	BENZENE, 1,2-DIMETHYL-
E	538-29-0	BENZENE, 1,2-DINITRO-
E	120-82-1	BENZENE, 1,2,4-TRICHLORO-
E	95-94-3	BENZENE, 1,2,4,5-TETRACHLORO-
E	541-73-1	BENZENE, 1,3-DICHLORO-
	108-57-6	BENZENE, 1,3-DIETHENYL-
	141-93-5	BENZENE, 1,3-DIETHYL-
E	108-38-3	BENZENE, 1,3-DIMETHYL-
E	99-65-0	BENZENE, 1,3-DINITRO-
	99-35-4	BENZENE, 1,3,5-TRINITRO-
ES	106-46-7	BENZENE, 1,4-DICHLORO-
	105-05-5	BENZENE, 1,4-DIETHYL-
E	106-42-3	BENZENE, 1,4-DIMETHYL-
E	100-25-4	BENZENE, 1,4-DINITRO-
	2100-42-7	BENZENE, 2-CHLORO-1,4-DIMETHOXY-
E	606-20-2	BENZENE, 2-METHYL-1,3-DINITRO-
	118-96-7	BENZENE, 2-METHYL-1,3,5-TRINITRO-
ES	1836-75-5	BENZENE, 2,4-DICHLORO-1,4-NITROPHENOXY-
ES	584-84-9	BENZENE, 2,4-DIISOCYANATO-1-METHYL-
E	610-39-9	BENZENE, 4-METHYL-1,2-DINITRO-
E	100-14-1	BENZENE, 1-(CHLOROMETHYL)-4-NITRO-
E	26471-62-5	BENZENE, 2,4-DIISOCYANATOMETHYL-
E	510-15-6	BENZENEACETIC ACID, 4-CHLORO-.ALPHA.-(4-CHLOROPHENYL)-.ALPHA.-HYDROXY- ETHYL ESTER
E	140-29-4	BENZENEACETONITRILE
E	98-05-5	BENZENEARSONIC ACID
ES	305-03-3	BENZENEBUTANOIC ACID, 4-[BIS(2-CHLOROETHYL)AMINO]-
	614-45-9	BENZENECARBOPEROXOIC ACID, 1,1-DIMETHYLETHYL ESTER
	12385-08-9	BENZENEDIOL
	98-84-0	BENZENEMETHANAMINE, .ALPHA.-METHYL-
S	59-96-1	BENZENEMETHANAMINE, N-(2-CHLOROETHYL)-N-(1-METHYL-2-PHENOXYETHYL)-
S	63-92-3	BENZENEMETHANAMINE, N-(2-CHLOROETHYL)-N-(1-METHYL-2-PHENOXYETHYL)-, HYDROCHLORIDE
	92-59-1	BENZENEMETHANAMINE, N-ETHYL-N-PHENYL-
	772-54-3	BENZENEMETHANAMINE, N,N-DIETHYL-
	2449-49-2	BENZENEMETHANAMINE, N,N,.ALPHA.-TRIMETHYL-
S	1694-09-3	BENZENEMETHANAMINIUM, N-[4-(DIMETHYLAMINO)PHENYL]4-[ETHYL(3-SULFOPHENYL)METHYL]AMINO] PHENYL[METHYLENE]-2,5-CYCLOHEXADIEN-1-YLIDENE]-N-ETHYL-SULFO-, HYDROXIDE, INNER SALT, SODIUM SALT
	100-53-8	BENZENEMETHANETHIOL
	100-51-6	BENZENEMETHANOL

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323-10

(139320) No. 181 Dec. 89

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*ES	CAS NO.	SUBSTANCE NAME
	7568-93-6	BENZENEMETHANOL, .ALPHA.-(AMINOMETHYL)-
	2454-37-7	BENZENEMETHANOL, 3-AMINO-.ALPHA.-METHYL-
E	27176-87-0	BENZENESULFONIC ACID, DODECYL-
E	26264-06-2	BENZENESULFONIC ACID, DODECYL-, CALCIUM SALT
E	27323-41-7	BENZENESULFONIC ACID, DODECYL-, COMPD. WITH 2,2',2'-NITRILOTRIS[ETHANOL] (1:1)
E	25155-30-0	BENZENESULFONIC ACID, DODECYL-, SODIUM SALT
E	54590-52-2	BENZENESULFONIC ACID, 4-DODECYL-, COMPD. WITH 1-AMINO-2-PROPANOL (1:1)
E	127-82-2	BENZENESULFONIC ACID, 4-HYDROXY-, ZINC SALT (2:1)
	104-15-4	BENZENESULFONIC ACID, 4-METHYL-
	80-48-8	BENZENESULFONIC ACID, 4-METHYL-, METHYL ESTER
E	108-98-5	BENZENETHIOL
E	3615-21-2	BENZIMIDAZOLE, 4,5-DICHLORO-2-(TRIFLUOROMETHYL)-
ES	50-32-8	BENZO[A]PYRENE
E	191-24-2	BENZO[GHI]PERYLENE
ES	205-82-3	BENZO[J]FLUORANTHENE
ES	207-08-9	BENZO[K]FLUORANTHENE
ES	189-55-9	BENZO[RST]PENTAPHENE
E	65-85-0	BENZOIC ACID
E	1863-63-4	BENZOIC ACID, AMMONIUM SALT
	136-60-7	BENZOIC ACID, BUTYL ESTER
	93-89-0	BENZOIC ACID, ETHYL ESTER
	50-78-2	BENZOIC ACID, 2-(ACETYLOXY)-
	119-36-8	BENZOIC ACID, 2-HYDROXY-, METHYL ESTER
E	1918-00-9	BENZOIC ACID, 3,4-DICHLORO-2-METHOXY- BENZOL DILUENT
E	100-47-0	BENZONITRILE
E	1194-65-6	BENZONITRILE, 2,6-DICHLORO-
S	98-88-4	BENZOYL CHLORIDE
S	1302-52-9	BERYL (AL <sub>2</sub> BE <sub>3</sub> (SiO <sub>3</sub> ) <sub>6</sub> )
*ES	7440-41-7	BERYLLIUM
ES		BERYLLIUM ALUMINUM ALLOY
ES	7787-47-5	BERYLLIUM CHLORIDE (BECL <sub>2</sub> )
E		BERYLLIUM DUST
ES	7787-49-7	BERYLLIUM FLUORIDE (BEF <sub>2</sub> )
ES	13327-32-7	BERYLLIUM HYDROXIDE (BE(OH) <sub>2</sub> )
ES	1304-56-9	BERYLLIUM OXIDE (BEO)
		BICHROMATES
E	15271-41-7	BICYCLO[2.2.1]HEPTANE-2-CARBONITRILE, 5-CHLORO-6-(((METHYLAMINO)CARBONYLOXY)IMINO)-, (1S-(1-ALPHA, 2-BETA, 4-SLPHA, 5-ALPHA, 6E))-
	16219-75-3	BICYCLO[2.2.1]HEPT-2-ENE, 5-ETHYLIDENE-
	121-46-0	BICYCLO[2.2.1]HEPTA-2,5-DIENE
	507-70-0	BICYCLO[2.2.1]HEPTAN-2-OL, 1,7,7-TRIMETHYL-, ENDO-
	76-22-2	BICYCLO[2.2.1]HEPTAN-2-ONE, 1,7,7-TRIMETHYL-
	80-56-8	BICYCLO[3.1.1]HEPT-2-ENE, 2,6,6-TRIMETHYL-
E	534-07-6	BISCHLOROMETHYL) KETONE BIS(2-CHLOROETHOXY)ETHYLETHYER
E	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER
E	103-23-1	BIS(2-ETHYLHEXYL) ADIPATE
S	154-93-8	BISCHLOROETHYL NITROSUREA
	37293-14-4	BISMUTH TELLURIDE
	1304-82-1	BISMUTH TELLURIDE (BI <sub>2</sub> TE <sub>3</sub> )
E	4044-65-9	BITOSCANATE
S		BITUMENS, EXTRACTS OF STEAM REFINED AND AIR REFINED
S		BOOT AND SHOE MANUFACTURE AND REPAIR (CERTAIN EXPOSURES)
	10294-33-4	BORANE, TRIBROMO-
	97-94-9	BORANE, TRIETHYL-
E	7637-07-2	BORANE, TRIFLUORO-
E	13826-83-0	BORATE(1-), TETRAFLUORO-, AMMONIUM
E	13814-96-5	BORATE(1-), TETRAFLUORO-, LEAD(2+) (2:1)
	1303-96-4	BORAX (B <sub>4</sub> NA <sub>2</sub> O <sub>7</sub> ·10H <sub>2</sub> O)
	688-74-4	BORIC ACID (H <sub>3</sub> BO <sub>3</sub> ), TRIBUTYL ESTER
	121-43-	BORIC ACID (H <sub>3</sub> BO <sub>3</sub> ), TRIMETHYL ESTER
	5419-55-6	BORIC ACID (H <sub>3</sub> BO <sub>3</sub> ), TRIS(1-METHYLETHYL) ESTER

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Pt. XIII

*ES	CAS NO.	SUBSTANCE NAME
	13195-76-1	BORIC ACID (H <sub>3</sub> BO <sub>3</sub> ), TRIS(2-METHYLPROPYL) ESTER
	51845-86-4	BORIC ACID, ETHYL ESTER
E	1332-07-6	BORIC ACID, ZINC SALT
		BORNEO CAMPHOR
	54566-73-3	BORON OXIDE
	1303-86-2	BORON OXIDE (B <sub>2</sub> O <sub>3</sub> )
	1330-43-4	BORON SODIUM OXIDE (B <sub>4</sub> NA <sub>2</sub> O <sub>7</sub> )
E	10294-34-5	BORON TRICHLORIDE
E	353-42-4	BORON TRIFLUORIDE COMPOUND WITH METHYL ETHER(1:1)
	109-43-7	BORON, TRIFLUORO[1,1'-OXYBIS(ETHANE)]-, (T-4)-
E	28772-56-7	BROMADIOLONE
	7758-01-2	BROMIC ACID, POTASSIUM SALT
E	7726-95-6	BROMINE
	7787-71-5	BROMINE FLUORIDE (BRF <sub>3</sub> )
	7789-30-2	BROMINE FLUORIDE (BRF <sub>5</sub> )
E	598-31-2	BROMOACETONE
		BRONZING LIQUID
E	357-57-3	BRUCINE
E	123-72-8	BUTANAL
	110-69-0	BUTANAL, OXIME
	97-96-1	BUTANAL, 2-ETHYL-
	96-17-3	BUTANAL, 2-METHYL-
	107-89-1	BUTANAL, 3-HYDROXY-
	590-86-3	BUTANAL, 3-METHYL-
	92-15-9	BUTANAMIDE, N-(2-METHOXYPHENYL)-3-OXO-
	97-36-9	BUTANAMIDE, N-(2,4-DIMETHYLPHENYL)-3-OXO-
	122-82-7	BUTANAMIDE, N-(4-ETHOXYPHENYL)-3-OXO-
	102-01-2	BUTANAMIDE, 3-OXO-N-PHENYL-
	106-97-8	BUTANE
	111-34-2	BUTANE, 1-(ETHENYLOXY)-
	109-65-9	BUTANE, 1-BROMO-
	109-69-3	BUTANE, 1-CHLORO-
	107-84-6	BUTANE, 1-CHLORO-3-METHYL-
	628-81-9	BUTANE, 1-ETHOXY-
	111-36-4	BUTANE, 1-ISOCYANATO-
	142-96-1	BUTANE, 1,1'-OXYBIS-
	616-21-7	BUTANE, 1,2-DICHLORO-
	110-56-5	BUTANE, 1,4-DICHLORO-
	78-86-4	BUTANE, 2-CHLORO-
	594-36-5	BUTANE, 2-CHLORO-2-METHYL-
	78-78-4	BUTANE, 2-METHYL-
	75-83-2	BUTANE, 2,2-DIMETHYL-
	464-06-2	BUTANE, 2,2,3-TRIMETHYL-
	7581-97-7	BUTANE, 2,3-DICHLORO-
	79-29-8	BUTANE, 2,3-DIMETHYL-
	3333-52-6	BUTANEDINITRILE, TETRAMETHYL-
E	121-75-5	BUTANEDIOIC ACID, [DIMETHOXYPHOSPHINOTHIOYLTHIO]-, DIETHYL ESTER
E	815-82-7	BUTANEDIOIC ACID, 2,3-DIHYDROXY- [R-(R*,R*)]-, COPPER(2+) SALT (1:1)
E	3164-29-2	BUTANEDIOIC ACID, 2,3-DIHYDROXY- [R-(R*,R*)]-, DIAMMONIUM SALT
	109-74-0	BUTANENITRILE
E	107-92-6	BUTANOIC ACID
	109-21-7	BUTANOIC ACID, BUTYL ESTER
	123-20-6	BUTANOIC ACID, ETHYL ESTER
	105-54-4	BUTANOIC ACID, ETHYL ESTER
	623-42-7	BUTANOIC ACID, METHYL ESTER
	105-66-8	BUTANOIC ACID, PROPYL ESTER
	88-09-5	BUTANOIC ACID, 2-ETHYL-
	141-97-9	BUTANOIC ACID, 3-OXO-, ETHYL ESTER
	105-45-3	BUTANOIC ACID, 3-OXO-, METHYL ESTER
		BUTENES
		BUTYL LITHIUM IN HYDROCARBON SOLVENTS
E	4680-78-8	C.I. ACID GREEN 3
E	569-64-2	C.I. BASIC GREEN 4
E	12768-82-0	C.I. BASIC ORANGE 15
E	989-38-8	C.I. BASIC RED 1

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323-12

(139322) No. 181 Dec. 89

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*ES	CAS NO.	SUBSTANCE NAME
E	2832-40-8	C.I. DISPERSE YELLOW 3
E	81-88-9	C.I. FOOD RED 15
E	12002-03-8	C.I. PIGMENT GREEN 21
E	3118-97-6	C.I. SOLVENT ORANGE 7
E	842-07-9	C.I. SOLVENT YELLOW 14
E	128-66-5	C.I. VAT YELLOW 4
E	75-90-5	CACODYLIC ACID
*ES	7440-43-9	CADMIUM
E	7789-42-6	CADMIUM BROMIDE (CDBR2)
ES	10108-64-2	CADMIUM CHLORIDE (CDCL2)
E		CADMIUM DUST
E		CADMIUM FUME
ES	1306-19-0	CADMIUM OXIDE (CDO)
E		CADMIUM POWDER
E	2223-93-0	CADMIUM STEARATE
ES	1306-23-6	CADMIUM SULFIDE (CDS)
E	7440-70-2	CALCIUM
E	75-20-7	CALCIUM CARBIDE (CAC2)
E	592-01-8	CALCIUM CYANIDE (CA(CN)2)
E	1305-62-0	CALCIUM HYDROXIDE (CA(OH)2)
E	1305-78-8	CALCIUM OXIDE (CAO)
E	7778-18-9	CALCIUM SULFATE
E	56-25-7	CANTHARIDIN
E	51-83-2	CARBACHOL CHLORIDE
E	17804-35-2	CARBAMIC ACID, 1-[1-BUTYLAMINO]CARBONYL-1H-BENZIMIDAZOL-2-YL], METHYL ESTER
ES	51-79-6	CARBAMIC ACID, ETHYL ESTER
E	26419-73-8	CARBAMIC ACID, METHYL-, O-[(2,4-DIMETHYL-1,3-DITHIOLAN-2-YL)METHYLENEAMINO]-
ES	615-53-2	CARBAMIC ACID, METHYLNITROSO-, ETHYL ESTER
E	1111-78-0	CARBAMIC ACID, MONOAMMONIUM SALT
E	88-10-8	CARBAMIC CHLORIDE, DIETHYL-
ES	79-44-7	CARBAMIC CHLORIDE, DIMETHYL-
E	630-10-4	CARBAMIMIDOSELENOIC ACID
S	95-06-7	CARBAMODITHIOIC ACID, 1,2-ETHANEDIYL ESTER
ES	34731-32-3	CARBAMODITHIOIC ACID, DIETHYL-, 2-CHLORO-2-PROPENYL ESTER
E	2303-16-4	CARBAMODITHIOIC ACID, BIS(1-METHYLETHYL)-, S-(2,3-DICHLORO-2-PROPENYL) ESTER
E	1333-86-4	CARBON BLACK
E	124-38-9	CARBON DIOXIDE
E	75-15-0	CARBON DISULFIDE
E	630-08-0	CARBON MONOXIDE
E	463-58-1	CARBON OXIDE SULFIDE (COS)
E	10361-29-2	CARBONIC ACID, AMMONIUM SALT
ES	13106-47-3	CARBONIC ACID, BERYLLIUM SALT (1:1)
E	30714-78-4	CARBONIC ACID, BUTYL ETHYL ESTER
E	506-87-6	CARBONIC ACID, DIAMMONIUM SALT
E	105-58-8	CARBONIC ACID, DIETHYL ESTER
E	616-38-6	CARBONIC ACID, DIMETHYL ESTER
E	1066-33-7	CARBONIC ACID, MONOAMMONIUM SALT
ES	16337-84-1	CARBONIC ACID, NICKEL SALT
ES	3333-67-3	CARBONIC ACID, NICKEL(2+) SALT (1:1)
ES	17237-93-3	CARBONIC ACID, NICKEL(2+) SALT (2:1)
E	3486-35-9	CARBONIC ACID, ZINC SALT (1:1)
E	75-44-5	CARBONIC DICHLORIDE
E	353-50-4	CARBONIC DIFLUORIDE
E	541-41-3	CARBONOCHLORIDIC ACID, ETHYL ESTER
E	2937-50-0	CARBONOCHLORIDIC ACID, 2-PROPENYL ESTER
E	13889-92-4	CARBONOCHLORIDOTHIOIC ACID, S-PROPYL ESTER
E	140-89-6	CARBONODITHIOIC ACID, O-ETHYL ESTER, POTASSIUM SALT
E	786-19-6	CARBOPHENOTHION
S	9000-07-1	CARRAGEENAN
E	9004-34-6	CAUSTIC ARSENIC OIL
E	9004-70-0	CELLULOSE
E	9004-70-0	CELLULOSE, NITRATE

\*—ANY COMPOUND OF THIS SUBSTANCE IS ALSO AN ENVIRONMENTAL HAZARD  
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 S—SPECIAL HAZARDOUS SUBSTANCE



## RIGHT-TO-KNOW

Pt. XIII

*ES	CAS NO.	SUBSTANCE NAME
	65997-15-1	CEMENT, PORTLAND, CHEMICALS
	21351-79-1	CESIUM HYDROXIDE (CS(OH))
E	133-90-4	CHLORAMBEN
E		CHLORDANE (TECHNICAL MIXTURE AND METABOLITES)
F	13477-00-4	CHLORIC ACID, BARIUM SALT
	10137-74-3	CHLORIC ACID, CALCIUM SALT
	3811-04-9	CHLORIC ACID, POTASSIUM SALT
	7775-09-9	CHLORIC ACID, SODIUM SALT
E	10361-95-2	CHLORIC ACID, ZINC SALT
F		CHLORINATED BENZENES
E	55720-99-5	CHLORINATED DIPHENYL OXIDE
E		CHLORINATED ETHANES
E		CHLORINATED NAPHTHALENE
E		CHLORINATED PHENOLS
E	7782-50-5	CHLORINE
	7790-91-2	CHLORINE FLUORIDE (CLF <sub>3</sub> )
E	10049-04-4	CHLORINE OXIDE (CL <sub>2</sub> O)
	7791-21-1	CHLORINE OXIDE (CL <sub>2</sub> O)
E	24934-91-6	CHLORMEPHOS
F	999-81-5	CHLORMEQUAT CHLORIDE
	78-95-5	CHLOROACETONE
E		CHLOROALKYL ETHERS
E	627-11-2	CHLOROETHYL CHLOROFORMATE
E	3691-35-8	CHLOROPHACINONE
ES		CHLOROPHENOLS
E	7790-94-5	CHLOROSULFURIC ACID
E	1897-45-6	CHLOROTHALONIL
	7758-19-2	CHLOROUS ACID, SODIUM SALT
E	1982-47-4	CHLOROXURON
E	21923-23-9	CHLORTHIOPHOS
E	11115-74-5	CHROMIC ACID
E	7738-94-5	CHROMIC ACID
	1189-85-1	CHROMIC ACID (H <sub>2</sub> CR <sub>2</sub> O <sub>4</sub> ), BIS(1,1-DIMETHYLETHYL) ESTER
ES	13765-19-0	CHROMIC ACID (H <sub>2</sub> CR <sub>2</sub> O <sub>4</sub> ), CALCIUM SALT (1:1)
E	7788-98-9	CHROMIC ACID (H <sub>2</sub> CR <sub>2</sub> O <sub>4</sub> ), DIAMMONIUM SALT
E	14307-35-8	CHROMIC ACID (H <sub>2</sub> CR <sub>2</sub> O <sub>4</sub> ), DILITHIUM SALT
E	7789-00-6	CHROMIC ACID (H <sub>2</sub> CR <sub>2</sub> O <sub>4</sub> ), DIPOTASSIUM SALT
E	7775-11-3	CHROMIC ACID (H <sub>2</sub> CR <sub>2</sub> O <sub>4</sub> ), DISODIUM SALT
ES	7758-97-6	CHROMIC ACID (H <sub>2</sub> CR <sub>2</sub> O <sub>4</sub> ), LEAD(2+) SALT (1:1)
	13423-61-5	CHROMIC ACID (H <sub>2</sub> CR <sub>2</sub> O <sub>4</sub> ), MAGNESIUM SALT (1:1)
ES	7789-06-2	CHROMIC ACID (H <sub>2</sub> CR <sub>2</sub> O <sub>4</sub> ), STRONTIUM SALT (1:1)
ES	13530-65-9	CHROMIC ACID (H <sub>2</sub> CR <sub>2</sub> O <sub>4</sub> ), ZINC SALT (1:1)
E	13530-68-2	CHROMIC ACID (H <sub>2</sub> CR <sub>2</sub> O <sub>7</sub> )
	14307-33-6	CHROMIC ACID (H <sub>2</sub> CR <sub>2</sub> O <sub>7</sub> ), CALCIUM SALT (1:1)
E	7789-09-5	CHROMIC ACID (H <sub>2</sub> CR <sub>2</sub> O <sub>7</sub> ), DIAMMONIUM SALT
E	7778-50-9	CHROMIC ACID (H <sub>2</sub> CR <sub>2</sub> O <sub>7</sub> ), DIPOTASSIUM SALT
E	10588-01-9	CHROMIC ACID (H <sub>2</sub> CR <sub>2</sub> O <sub>7</sub> ), DISODIUM SALT
E	14018-95-2	CHROMIC ACID (H <sub>2</sub> CR <sub>2</sub> O <sub>7</sub> ), ZINC SALT (1:1)
E	10025-73-7	CHROMIC CHLORIDE
		CHROMITE ORE PROCESSING (CHROMATE)
*ES	7440-47-3	CHROMIUM
E	10049-05-5	CHROMIUM CHLORIDE (CRCL <sub>2</sub> )
ES		CHROMIUM COMPOUNDS, HEXAVALENT
FS	11119-70-3	CHROMIUM LEAD OXIDE
S	1333-82-0	CHROMIUM OXIDE (CR <sub>2</sub> O <sub>3</sub> )
E	12680-48-7	CHROMIUM SODIUM OXIDE
E	14977-61-8	CHROMIUM, DICHLORODIOXO-, (T-4)
E	22541-79-3	CHROMIUM, ION (CR <sub>2</sub> +)
E	16065-83-1	CHROMIUM, ION (CR <sub>3</sub> +)
E	18540-29-9	CHROMIUM, ION (CR <sub>6</sub> +)
E	218-01-9	CHRYSENE
S	3697-24-3	CHRYSENE, 5-METHYL-
S	12001-29-5	CHRYSOTILE (MG <sub>3</sub> H <sub>2</sub> (SIO <sub>4</sub> ) <sub>2</sub> .H <sub>2</sub> O)
		COAL DUST
		COAL GAS

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323-14

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*ES	CAS NO.	SUBSTANCE NAME
S		COAL GASSIFICATION PROCESS (OLDER)
S		COAL SOOT
S		COAL TAR PITCH VOLATILES AS BENZENE SOLUBLES
S		COAL TAR PITCHES
S		COAL TARS (DURING DESTRUCTIVE DISTILLATION)
*E	7440-48-4	COBALT
E	7789-43-7	COBALT BROMIDE (COBR <sub>2</sub> )
E	37264-96-3	COBALT CARBONYL
E	10210-68-1	COBALT CARBONYL
S		COBALT CHROMIUM ALLOY
E	62207-76-5	COBALT FUME
E		COBALT, ((2,2'-(1,2-ETHANEDIYL)BIS (NITRILOMETHYLIDYNE)BIS(6-FLUOROPHENOLATO)(2-)-N,N',O,O')-
E	16842-03-8	COBALT, TETRACARBONYLHYDRO-
E	8001-69-2	COD-LIVER OIL
ES		COKE OVEN EMISSIONS
S		COKE PRODUCTION
E		COKE-OVEN GAS
E	64-86-8	COLCHICINE
S		COMBINED ORAL CONTRACEPTIVES
S	7280-37-7	CONJUGATED ESTROGENS: PIPERAZINE ESTRONE SULFATE
S	16680-47-0	CONJUGATED ESTROGENS: SODIUM EQUILIN SULFATE
S	438-67-5	CONJUGATED ESTROGENS: SODIUM ESTRONE SULFATE
S		CONJUGATED OESTROGENS
*E	7440-50-8	COPPER
E	7447-39-4	COPPER CHLORIDE (CUCL <sub>2</sub> )
E	544-92-3	COPPER CYANIDE
E		COPPER DUST
E		COPPER FUME
E	10380-29-7	COPPER(2+), TETRAAMMINE-, SULFATE (1:1), MONOHYDRATE
E	8001-30-7	CORN OIL
E		COTTON DUST, RAW
E	8001-29-4	COTTONSEED OIL
E	5836-29-3	COUMATETRALYL
ES	8001-58-9	CREOSOTE
E	535-89-7	CRIMIDINE
E	14464-46-1	CRISTOBALITE (SIO <sub>2</sub> )
S		CRISTOBALITE DUST
S	12001-28-4	CROCIDOLITE
S	61105-31-5	CROCIDOLITE (FE <sub>2</sub> MG <sub>3</sub> NA <sub>2</sub> (SIO <sub>3</sub> ) <sub>8</sub> )
S	53799-46-5	CROCIDOLITE (FE <sub>2</sub> NA <sub>2</sub> (SIO <sub>3</sub> ) <sub>8</sub> )
E	123-73-9	CROTONALDEHYDE
ES	16071-86-6	CUPRATE(2-), [5-[H'-][2,6-DIHYDROXY-3-[(2-HYDROXY-5-SULFOPHENYL)AZO]PHENYL]AZO][1,1'- BIPHENYL]-4-YL]AZO-2-HYDROXYBENZOATO(4)-], DISODIUM
E	5893-66-3	CUPRIC OXALATE
E	420-04-2	CYANAMIDE
E	156-62-7	CYANAMIDE, CALCIUM SALT (1:1)
E	1467-79-4	CYANAMIDE, DIMETHYL-
*E	57-12-5	CYANIDE
E	2074-87-5	CYANOGEN
E	506-68-3	CYANOGEN BROMIDE
E	506-77-4	CYANOGEN CHLORIDE
E	506-78-5	CYANOGEN IODIDE
E	2636-26-2	CYANOPHOS
E	675-14-9	CYANURIC FLUORIDE
E	287-23-0	CYCLOBUTANE
E	4806-61-5	CYCLOBUTANE, ETHYL-
E	291-64-5	CYCLOHEPTANE
E	108-91-8	CYCLOHEXANAMINE
E	1195-42-2	CYCLOHEXANAMINE, N-(1-METHYLETHYL)-
E	5432-61-1	CYCLOHEXANAMINE, N-(2-ETHYLHEXYL)-
E	10108-56-2	CYCLOHEXANAMINE, N-BUTYL-
E	101-83-7	CYCLOHEXANAMINE, N-CYCLOHEXYL-
E	5459-93-8	CYCLOHEXANAMINE, N-ETHYL-

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*ES	CAS NO.	SUBSTANCE NAME
E	110-82-7	CYCLOHEXANE
	542-18-7	CYCLOHEXANE, CHLORO-
	1331-43-7	CYCLOHEXANE, DIETHYL-
	1678-91-7	CYCLOHEXANE, ETHYL-
	108-87-2	CYCLOHEXANE, METHYL-
E	1122-60-7	CYCLOHEXANE, NITRO-
	5124-30-1	CYCLOHEXANE, 1,1'-METHYLENEBIS[4-ISOCYANATO-
S	608-73-1	CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-
E	319-86-8	CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1,ALPHA.,2,ALPHA.,3,ALPHA.,4,BETA.,5,ALPHA.,6,BETA.)-
ES	58-89-9	CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1,ALPHA.,2,ALPHA.,3,BETA.,4,ALPHA.,5,ALPHA.,6,BETA.)-
ES	319-84-6	CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1,ALPHA.,2,ALPHA.,3,BETA.,4,ALPHA.,5,BETA.,6,BETA.)-
ES	319-85-7	CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1,ALPHA.,2,BETA.,3,ALPHA.,4,BETA.,5,ALPHA.,6,BETA.)-
	591-21-9	CYCLOHEXANE, 1,3-DIMETHYL-
	589-90-2	CYCLOHEXANE, 1,4-DIMETHYL-
	624-29-3	CYCLOHEXANE, 1,4-DIMETHYL-, CIS-
	2207-04-7	CYCLOHEXANE, 1,4-DIMETHYL-, TRANS-
E	4098-71-9	CYCLOHEXANE, 5-ISOCYANATO-1-(ISOCYANATOMETHYL)-1,3,3-TRIMETHYL-
	108-93-0	CYCLOHEXANOL
	25639-42-3	CYCLOHEXANOL, METHYL-
	1321-60-4	CYCLOHEXANOL, TRIMETHYL-
	116-02-9	CYCLOHEXANOL, 3,3,5-TRIMETHYL-
E	108-94-1	CYCLOHEXANONE
	583-60-8	CYCLOHEXANONE, 2-METHYL-
	110-83-8	CYCLOHEXENE
	100-40-3	CYCLOHEXENE, 4-ETHENYL-
	591-47-9	CYCLOHEXENE, 4-METHYL-
	1321-16-0	CYCLOHEXENECARBOXALDEHYDE
	287-92-3	CYCLOPENTANE
	1640-89-7	CYCLOPENTANE, ETHYL-
	96-37-7	CYCLOPENTANE, METHYL-
	120-92-3	CYCLOPENTANONE
	142-29-0	CYCLOPENTENE
	75-19-4	CYCLOPROPANE
E	121-21-1	CYCLOPROPANECARBOXYLIC ACID, 2,2-DIMETHYL-3-(2-METHYL-1-PROPENYL)-, 2-METHYL-4-OXO-3-(2,4-PENTADIENYL)-2-CYCLOPENTEN-1-YL ESTER, [IR-[1,ALPHA.[S*(O)],3,BETA.]]-
E	121-29-9	CYCLOPROPANECARBOXYLIC ACID, 3-(3-METHOXY-2-METHYL-3-OXO-1-PROPENYL)-, 2,2-DIMETHYL-, 2-METHYL-4-OXO-3-(2,4-PENTADIENYL)-2-CYCLOPENTEN-1-YL ESTER, [R-[1,ALPHA.[S*(Z)],3,BETA.[E]]-
ES	18883-66-4	D-GLUCOSE, 2-DEOXY-2-[[[METHYLNITROSOAMINO]CARBONYL]AMINO]-
E		DDT AND METABOLITES
E	17702-41-9	DECABORANE(14)
E	1163-19-5	DECABROMODIPHENYL OXIDE
	124-18-5	DECANE
E	919-86-8	DEMETON-S-METHYL
	7782-39-0	DENATURED ALCOHOL
		DEUTERIUM
E	10311-84-9	DIALIFOS
E	25376-45-8	DIAMINOTOLUENE
E	823-40-5	DIAMINOTOLUENE
E	496-72-0	DIAMINOTOLUENE
ES	226-36-8	DIBENZ[A,H]ACRIDINE
ES	53-70-3	DIBENZ[A,H]ANTHRACENE
ES	224-42-0	DIBENZ[A,J]ACRIDINE
S		DIBENZ[A,I]PYRENE
ES	189-64-0	DIBENZO[B,DEF]CHRYSENE
ES	1746-01-6	DIBENZO[B,E][1,4]DIOXIN, 2,3,7,8-TETRACHLORO-
E	132-64-9	DIBENZOFURAN
		DIBENZOYL CHLORIDE
E	19287-45-7	DIBORANE(6)
E		DICHLOROBENZIDINE

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Ch. 323 HAZARDOUS SUBSTANCE LIST

*ES	CAS NO.	SUBSTANCE NAME
E	149-74-6	DICHLOROMETHYLPHENLSILANE
E	26638-19-7	DICHLOROPENTANES DICHLOROPROPANE DICHLOROSILANE DICHROMATES
S		DIENOESTROL DIESEL FUEL OIL DIETHYL ACETOACETATE
E	814-49-3	DIETHYL CHLOROPHOSPHATE
E	311-45-5	DIETHYL-P-NITROPHENYL PHOSPHATE
E	1642-54-2	DIETHYLCARBAMAZINE CITRATE
E	71-63-6	DIGITOXIN
S		DIGLYCIDYL RESORCINOL ETHER
E	20830-75-5	DIGOXIN
E	115-28-4	DIMEFOX
E	60-51-5	DIMETHOATE
E	2524-03-0	DIMETHYL PHOSPHOROCHLORIDOTHIOATE
E	99-98-9	DIMETHYL-P-PHENYLENEDIAMINE DIMETHYLPYPERAZINE-CIS
E	644-64-4	DIMETILAN
E	88-85-7	DINOSEB
E	1420-07-1	DINOTERB
E	82-66-6	DIPHACINONE
E		DIPHENYLHYDRAZINE
E	152-16-9	DIPHOSPHORAMIDE,OCTAMETHYL-
E	107-49-3	DIPHOSPHORIC ACID, TETRAETHYL ESTER
E	7722-88-5	DIPHOSPHORIC ACID, TETRASODIUM SALT
E	2764-72-9	DIPYRIDO[1,2-A:2',1'-C]PYRAZINEDIUM, 6,7-DIHYDRO-
E	85-00-7	DIPYRIDO[1,2-A:2',1'-C]PYRAZINEDIUM, 6,7-DIHYDRO-, DIBROMIDE
E	65996-91-0	DISTILLATES (COAL TAR), UPPER
E	2179-59-1	DISULFIDE, 2-PROPENYL PROPYL
E	7681-57-4	DISULFUROUS ACID, DISODIUM SALT
E	7757-74-6	DISULFUROUS ACID, DISODIUM SALT
E	514-73-8	DITHIAZANINE IODIDE
E	541-53-7	DITHIOBIURET
E	7775-14-6	DITHIONOUS ACID, DISODIUM SALT
E	7779-86-4	DITHIONOUS ACID, ZINC SALT (1:1)
S	531-76-0	DL-PHENYLALANINE, 4-[BIS(2-CHLOROETHYL)AMINO]-
E	5350-03-8	DODECANOIC ACID, PENTYL ESTER
E	12415-34-8	EMERY
E	316-42-7	EMETINE,DIHYDROCHLORIDE
E		ENDOSULFAN AND METABOLITES
E	145-73-3	ENDOTHALL
E	2778-04-3	ENDOTHION
E		ENDRIN AND METABOLITES
E	50-14-6	ERGOCALCIFEROL
E	379-79-3	ERGOTAMINE TARTRATE
S	53-16-7	ESTRA-1,3,5(10)-TRIEN-17-ONE, 3-HYDROXY-
S	50-28-2	ESTRA-1,3,5(10)-TRIENE-3,17-DIOL (17.BETA.)-
E	75-04-7	ETHANAMINE
E	109-89-7	ETHANAMINE, N-ETHYL-
ES	55-18-5	ETHANAMINE, N-ETHYL-N-NITROSO-
ES	10595-95-6	ETHANAMINE, N-METHYL-N-NITROSO-
E	121-44-8	ETHANAMINE, N,N-DIETHYL-
ES	55-86-7	ETHANAMINE, 2-CHLORO-N-(2-CHLOROETHYL)-N-METHYL-, HYDROCHLORIDE
ES	302-70-5	ETHANAMINE, 2-CHLORO-N-(2-CHLOROETHYL)-N-METHYL-, N-OXIDE, HYDROCHLORIDE
E	74-84-0	ETHANE
E	74-96-4	ETHANE, BROMO-
E	75-00-3	ETHANE, CHLORO-
E	76-15-3	ETHANE, CHLOROPENTAFLUORO-
E	1320-37-2	ETHANE, DICHLOROTETRAFLUORO-
E	353-36-6	ETHANE, FLUORO-
E	67-72-1	ETHANE, HEXACHLORO-
E	540-67-0	ETHANE, METHOXY-

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## RIGHT-TO-KNOW

Pt. XIII

*ES	CAS NO.	SUBSTANCE NAME
	79-24-3	ETHANE, NITRO.
	598-92-5	ETHANE, 1-CHLORO-1-NITRO.
	75-68-3	ETHANE, 1-CHLORO-1,1-DIFLUORO.
F	75-34-3	ETHANE, 1,1-DICHLORO.
	594-72-9	ETHANE, 1,1-DICHLORO-1-NITRO.
	105-57-7	ETHANE, 1,1-DIETHOXY.
E	71-55-6	ETHANE, 1,1,1-TRICHLORO.
E	630-20-6	ETHANE, 1,1,1,2-TETRACHLORO.
	76-11-9	ETHANE, 1,1,1,2-TETRACHLORO-2,2-DIFLUORO.
E	79-00-5	ETHANE, 1,1,2-TRICHLORO.
F	76-13-1	ETHANE, 1,1,2-TRICHLORO-1,2,2-TRIFLUORO.
	79-27-6	ETHANE, 1,1,2,2-TETRABROMO.
E	79-34-5	ETHANE, 1,1,2,2-TETRACHLORO.
	76-12-0	ETHANE, 1,1,2,2-TETRACHLORO-1,2-DIFLUORO.
E	111-91-1	ETHANE, 1,1'-(METHYLENEBIS(OXY))BIS(2-CHLORO.
E	60-29-7	ETHANE, 1,1'-OXYBIS.
E	111-44-4	ETHANE, 1,1'-OXYBIS(2-CHLORO.
	627-53-2	ETHANE, 1,1'-SELENOBIS.
ES	505-60-2	ETHANE, 1,1'-THIOBIS(2-CHLORO.
	122-51-0	ETHANE, 1,1',1''-(METHYLDIYNETRIS(OXY))TRIS.
	112-26-5	ETHANE, 1,2-BIS(2-CHLOROETHOXY).
ES	106-93-4	ETHANE, 1,2-DIBROMO.
ES	107-06-2	ETHANE, 1,2-DICHLORO.
	629-14-1	ETHANE, 1,2-DIETHOXY.
	110-71-4	ETHANE, 1,2-DIMETHOXY.
	97-97-2	ETHANE, 2-CHLORO-1,1-DIMETHOXY.
E	460-19-5	ETHANEDINITRILE
	144-62-7	ETHANEDIOIC ACID
E	2944-67-4	ETHANEDIOIC ACID, AMMONIUM IRON(3+) SALT (3:3:1)
E	14258-49-2	ETHANEDIOIC ACID, AMMONIUM SALT
E	6009-70-7	ETHANEDIOIC ACID, DIAMMONIUM SALT, MONOHYDRATE
	6153-56-6	ETHANEDIOIC ACID, DIHYDRATE
E	5972-73-6	ETHANEDIOIC ACID, MONOAMMONIUM SALT, MONOHYDRATE
E	79-21-0	ETHANEPEROXOIC ACID
	107-71-1	ETHANEPEROXOIC ACID, 1,1-DIMETHYLETHYL ESTER
E	1622-32-8	ETHANESULFONYL CHLORIDE, 2-CHLORO.
ES	62-55-5	ETHANETHIOAMIDE
	75-08-1	ETHANETHIOL
E	16752-77-5	ETHANIMIDOTHIOIC ACID, N-[[[(METHYLAMINO)CARBONYL]OXY]-, METHYL ESTER
	64-17-5	ETHANOL
E	10140-87-1	ETHANOL, 1,2-AICHLORO-, ACETATE
	2842-38-8	ETHANOL, 2-(CYCLOHEXYLAMINO)-
	102-81-8	ETHANOL, 2-(DIBUTYLAMINO)-
	100-37-8	ETHANOL, 2-(DIETHYLAMINO)-
	108-01-0	ETHANOL, 2-(DIMETHYLAMINO)-
	92-50-2	ETHANOL, 2-(ETHYLPHENYLAMINO)-
	109-83-1	ETHANOL, 2-(METHYLAMINO)-
	93-90-3	ETHANOL, 2-(METHYLPHENYLAMINO)-
	122-98-5	ETHANOL, 2-(PHENYLAMINO)-
	622-08-2	ETHANOL, 2-(PHENYLMETHOXY)-
	109-59-1	ETHANOL, 2-(1-METHYLETHOXY)-
	111-77-3	ETHANOL, 2-(2-METHOXYETHOXY)-
	4439-24-1	ETHANOL, 2-(2-METHYLPROPOXY)-
	136-78-7	ETHANOL, 2-(2,4-DICHLOROPHENOXY)-, HYDROGEN SULFATE, SODIUM SALT
	10138-74-6	ETHANOL, 2-[[2-AMINO-1-METHYLETHYL]AMINO]-
	111-41-1	ETHANOL, 2-[[2-AMINOETHYL]AMINO]-
	141-43-5	ETHANOL, 2-AMINO.
	111-76-2	ETHANOL, 2-BUTOXY.
E	107-07-3	ETHANOL, 2-CHLORO.
	542-58-5	ETHANOL, 2-CHLORO-, ACETATE
E	110-80-5	ETHANOL, 2-ETHOXY.
	111-15-9	ETHANOL, 2-ETHOXY-, ACETATE
	60-24-2	ETHANOL, 2-MERCAPTO.
E	109-86-4	ETHANOL, 2-METHOXY.
	110-49-6	ETHANOL, 2-METHOXY-, ACETATE

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S—SPECIAL HAZARDOUS SUBSTANCE

323-18

(139328) No. 181 Dec. 89

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Ch. 323 HAZARDOUS SUBSTANCE LIST

*ES	CAS NO.	SUBSTANCE NAME
	102-79-4	ETHANOL, 2,2'-(BUTYLIMINO)BIS-
	139-87-7	ETHANOL, 2,2'-(ETHYLIMINO)BIS-
ES	1116-54-7	ETHANOL, 2,2'-(NITROSOIMINO)BIS-
	2160-93-2	ETHANOL, 2,2'-[(1,1-DIMETHYLETHYL)IMINO]BIS-
	91-99-6	ETHANOL, 2,2'-[(3-METHYLPHENYL)IMINO]BIS-
	112-27-6	ETHANOL, 2,2'-[1,2-ETHANEDIYLBIS(OXY)]BIS-
E	111-42-2	ETHANOL, 2,2'-IMINOBIS-
	111-46-6	ETHANOL, 2,2'-OXYBIS-
	111-48-8	ETHANOL, 2,2'-THIOBIS-
	102-71-6	ETHANOL, 2,2',2''-NITRILOTRIS-
E	98-86-2	ETHANONE, 1-PHENYL-
	1341-24-8	ETHANONE, 1-PHENYL-, MONOCHLORO DERIV.
E	532-27-4	ETHANONE, 2-CHLORO-1-PHENYL-
ES	4549-40-0	ETHENAMINE, N-METHYL-N-NITROSO-
E	74-85-1	ETHENE
E	110-75-8	ETHENE, (2-CHLOROETHOXY)-
	1663-35-0	ETHENE, (2-METHOXYETHOXY)-
E	593-50-2	ETHENE, BROMO-
ES	75-01-4	ETHENE, CHLORO-
	79-38-9	ETHENE, CHLOROTRIFLUORO-
	109-92-2	ETHENE, ETHOXY-
	75-02-5	ETHENE, FLUORO-
	107-25-5	ETHENE, METHOXY-
ES	127-18-4	ETHENE, TETRACHLORO-
	116-14-3	ETHENE, TETRAFLUORO-
	9002-84-0	ETHENE, TETRAFLUORO-, HOMOPOLYMER
E	79-01-6	ETHENE, TRICHLORO-
E	75-35-4	ETHENE, 1,1-DICHLORO-
	75-38-7	ETHENE, 1,1-DIFLUORO-
	109-93-3	ETHENE, 1,1'-OXYBIS-
E	540-59-0	ETHENE, 1,2-DICHLORO-
E	156-60-5	ETHENE, 1,2-DICHLORO-, (E)-
	156-59-2	ETHENE, 1,2-DICHLORO-, (Z)-
	463-51-4	ETHENONE
		ETHYL ALCOHOL AND WATER
E	542-90-5	ETHYL THIOCYANATE
E	538-07-8	ETHYLBIS(2-CHLOROETHYL)AMINE
E	371-62-0	ETHYLENE FLUOROETHYDRIN
	74-86-2	ETHYNE
	7572-29-4	ETHYNE, DICHLORO-
	927-80-0	ETHYNE, ETHOXY-
E	52-85-7	FAMPHUR
E	122-14-5	FENITROTHION
E	55488-87-4	FERRIC AMMONIUM OXALATE
	102-54-5	FERROCENE
E	7782-63-0	FERROUS SULFATE
		FIBROUS GLASS DUST
S	59536-65-1	FIREMASTER BP 6
	65996-68-1	FLUE GASES, FERROUS METAL, BLAST FURNACE
E	4301-50-2	FLUENETIL
E	2164-17-2	FLUOMETURON
E	206-44-0	FLUORANTHENE
	16984-48-8	FLUORIDE
		FLUORIDE DUST
E	7782-41-4	FLUORINE
E	144-49-0	FLUOROACETIC ACID
E	359-06-8	FLUOROACETYL CHLORIDE
E	51-21-8	FLUOROURACIL
ES	50-00-0	FORMALDEHYDE
E	107-16-4	FORMALDEHYDE CYANOHYDRIN
	75-12-7	FORMAMIDE
	68-12-2	FORMAMIDE, N,N-DIMETHYL-
E	23422-53-9	FORMETANATE
E	64-18-6	FORMIC ACID
	592-84-7	FORMIC ACID, BUTYL ESTER

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Pt. XIII

*ES	CAS NO.	SUBSTANCE NAME
E	544-18-3	FORMIC ACID, COBALT(2+) SALT
	109-94-4	FORMIC ACID, ETHYL ESTER
	107-31-3	FORMIC ACID, METHYL ESTER
	638-49-3	FORMIC ACID, PENTYL ESTER
	110-74-7	FORMIC ACID, PROPYL ESTER
E	557-41-5	FORMIC ACID, ZINC SALT
E	625-55-8	FORMIC ACID, 1-METHYLETHYL ESTER
	542-55-2	FORMIC ACID, 2-METHYLPROPYL ESTER
E	2540-82-1	FORMOTHION
E	17702-57-7	FORMPARANATE
E	21548-32-3	FOSPHIETAN
E	1878-19-1	FUBERIDAZOLE
	68476-26-6	FUEL GASES
	8006-20-0	FUEL GASES, PRODUCER GAS
	8021-92-9	FUEL GASES, WATER GAS
		FUEL OIL
E	628-86-4	FULMINIC ACID, MERCURY(II)SALT
E	110-00-9	FURAN
E	109-99-9	FURAN, TETRAHYDRO-
	96-47-9	FURAN, TETRAHYDRO-2-METHYL-
	534-22-5	FURAN, 2-METHYL-
	625-86-5	FURAN, 2,5-DIMETHYL-
S		FURNITURE AND CABINET MAKING
E	13450-90-3	GALLIUM TRICHLORIDE
E	86290-81-5	GASOLINE
		GASOLINE (CASINGHEAD)
	68425-31-0	GASOLINE (NATURAL GAS), NATURAL
	7782-65-2	GERMANE
E	765-33-4	GLYCIDYLALDEHYDE
ES	13256-22-9	GLYCINE, N-METHYL-N-NITROSO-
ES	139-13-9	GLYCINE, N,N-BIS(CARBOXYMETHYL)-
E	60-00-4	GLYCINE, N,N'-1,2 ETHANEDIYLBIS[N-(CARBOXYMETHYL)-
		GLYCOL ETHERS
		GRAIN DUST (OAT, WHEAT, BARLEY)
	7782-42-5	GRAPHITE
		GRAPHITE (SYNTHETIC)
FS	70-25-7	GUANIDINE, N-METHYL-N'-NITRO-N-NITROSO-
	13397-24-5	GYPSSUM (CA(SO4)2H2O)
	7440-58-6	HAFNIUM
E		HALOETHERS
E		HALOMETHANES
	7440-59-7	HELIUM
		HEMATITE UNDERGROUND MINING (WITH EXPOSURE TO RADON)
F		HEPTACHLOR AND METABOLITES
	142-82-5	HEPTANE
	123-04-6	HEPTANE, 3-(CHLOROMETHYL)-
	103-44-6	HEPTANE, 3-[ETHENYLOXY]METHYL-
	4032-86-4	HEPTANE, 3,3-DIMETHYL-
	25339-56-4	HEPTENE
		HEXACHLORO DIPHENYL OXIDE
E	70-30-4	HEXACHLOROPHENE
E	1888-71-7	HEXACHLOROPROPENE
E	757-58-4	HEXAETHYL TETRAPHOSPHATE
E	4835-11-4	HEXAMETHYLENEDIAMINE, N,N'-DIBUTYL-
	66-25-1	HEXANAL
	123-05-7	HEXANAL, 2-ETHYL-
	496-03-7	HEXANAL, 2-ETHYL-3-HYDROXY-
	110-54-3	HEXANE
	25495-90-3	HEXANE, CHLORO-
	544-10-5	HEXANE, 1-CHLORO-
	112-58-3	HEXANE, 1,1'-OXYBIS-
	591-76-4	HEXANE, 2-METHYL-
	3522-94-9	HEXANE, 2,2,5-TRIMETHYL-
	584-94-1	HEXANE, 2,3-DIMETHYL-
	589-43-5	HEXANE, 2,4-DIMETHYL-

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Ch. 323 HAZARDOUS SUBSTANCE LIST

*ES	CAS NO.	SUBSTANCE NAME
	3074-77-9	HEXANE, 3-ETHYL-4-METHYL-
	589-34-4	HEXANE, 3-METHYL-
	3074-75-7	HEXANE, 4-ETHYL-2-METHYL-
E	111-69-3	HEXANEDINITRILE
E	124-04-9	HEXANEDIOIC ACID
	111-50-2	HEXANEDIOYL DICHLORIDE
	142-62-1	HEXANOIC ACID
	123-66-0	HEXANOIC ACID, ETHYL ESTER
	94-04-2	HEXANOIC ACID, 2-ETHYL-, ETHENYL ESTER
ES	302-01-2	HYDRAZINE
		HYDRAZINE (ANHYDROUS)
E	60-34-4	HYDRAZINE, METHYL-
	100-63-0	HYDRAZINE, PHENYL-
ES	10034-93-2	HYDRAZINE, SULFATE (1:1)
ES	57-14-7	HYDRAZINE, 1,1-DIMETHYL-
ES	1615-80-1	HYDRAZINE, 1,2-DIETHYL-
ES	540-73-8	HYDRAZINE, 1,2-DIMETHYL-
ES	122-66-7	HYDRAZINE, 1,2-DIPHENYL-
S	16568-02-8	HYDRAZINECARBOXYALDEHYDE, ETHYLIDENEMETHYL-
S	3570-75-0	HYDRAZINECARBOXYALDEHYDE, 2-[4-(5-NITRO-2-FURANYL)-2-THIAZOLYL]-
	10034-85-2	HYDRIODIC ACID
	10035-10-6	HYDROBROMIC ACID
S	8020-83-5	HYDROCARBON OILS
E	7647-01-0	HYDROCHLORIC ACID
E	74-90-8	HYDROCYANIC ACID
E	7664-39-3	HYDROFLUORIC ACID
	1333-74-0	HYDROGEN
	7722-84-1	HYDROGEN PEROXIDE (CONC > 52 PERCENT)
	7722-84-1	HYDROGEN PEROXIDE (H2O2)
E	7783-07-5	HYDROGEN SELENIDE (H2SE)
E	7783-06-4	HYDROGEN SULFIDE (H2S)
	61788-32-7	HYDROGENATED TERPHENYLS
E	80-15-9	HYDROPEROXIDE, 1-METHYL-1-PHENYLETHYL
	75-91-2	HYDROPEROXIDE, 1,1-DIMETHYLETHYL
E	123-31-9	HYDROQUINONE
	7803-49-8	HYDROXYLAMINE
E	7778-54-3	HYPOCHLOROUS ACID, CALCIUM SALT
E	7681-52-9	HYPOCHLOROUS ACID, SODIUM SALT
E	10022-70-5	HYPOCHLOROUS ACID, SODIUM SALT, PENTAHYDRATE
ES	193-39-5	INDENO[1,2,3-CD]PYRENE
	7440-74-6	INDIUM
E		INORGANIC ARSENIC
S	7553-56-2	IODINE
S		IRON AND STEEL FOUNDING
E	13463-40-6	IRON CARBONYL (FE(CO)5), (TB-5-11)
E	7758-94-3	IRON CHLORIDE (FECL2)
E	7705-08-0	IRON CHLORIDE (FECL3)
ES	9004-66-4	IRON DEXTRAN
E	7783-50-8	IRON FLUORIDE (FEF3)
	1309-37-1	IRON OXIDE (FE2O3)
E		IRON SALTS
	14484-64-1	IRON, TRIS(DIMETHYL-CARBAMODITHIOATO S,S'), (OC-6-11)
E	297-78-9	ISOBENZAN
E	102-36-3	ISOCYANIC ACID, 3,4-DICHLOROPHENYL ESTER
E	465-73-6	ISODRIN
E	55-91-4	ISOFLUORPHATE
	31394-54-4	ISOHEPTANE
	26635-64-3	ISOCTANE
	26952-21-6	ISOCTANOL
		ISOCTENES
E	42504-46-1	ISOPROPANOLAMINE DODECYLBENZENE SULFONATE
S		ISOPROPYL ALCOHOL MANUFACTURE (STRONG-ACID PROCESS)
E	108-23-6	ISOPROPYL CHLOROFORMATE
E	119-38-0	ISOPROPYLMETHYL PYRAZOLYL DIMETHYL-CARBAMATE
		JET FUELS JET B

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Pt. XIII

*ES	CAS NO.	SUBSTANCE NAME
		JET FUELS JP-4
		JET FUELS JP-6
E	1332-58-7	KAOLIN
	115-32-2	KELTHANE
	8008-20-6	KEROSENE (PETROLEUM)
ES	148-82-3	L-PHENYLALANINE, 4-[BIS(2-CHLOROETHYL)AMINO]-
ES	115-02-6	L-SERINE, DIAZOACETATE (ESTER)
	8006-54-0	LANOLIN
*E	7439-92-1	LEAD
E		LEAD (IV) ARSONATE
E	12612-47-4	LEAD CHLORIDE
E	7758-95-4	LEAD CHLORIDE (PBCL <sub>2</sub> )
ES	18454-12-1	LEAD CHROMATE OXIDE (PB <sub>2</sub> (CRO <sub>4</sub> O))
E	7783-46-2	LEAD FLUORIDE (PBF <sub>2</sub> )
E	10101-63-0	LEAD IODIDE (PBI <sub>2</sub> )
E	52652-59-2	LEAD STEARATE
E	15739-80-7	LEAD SULFATE
E	1314-87-0	LEAD SULFIDE (PBS)
ES	1335-32-6	LEAD, BIS(ACETATO-O)TETRAHYDROXYTRI-
E	56189-09-4	LEAD, BIS(OCTADECANOATO)DIOXIDI-
E	21609-90-5	LEPTOPHOS
E	541-25-3	LEWISITE
	8032-32-4	LIGROINE
	1317-65-3	LIMESTONE
	8001-26-1	LINSEED OIL
		LIQUEFIED NATURAL GAS
	7439-93-2	LITHIUM
		LITHIUM DICHROMATE
E	7580-67-8	LITHIUM HYDRIDE (LIH)
	108-44-1	M-TOLUIDINE
	13717-00-5	MAGNESITE (MG(CO <sub>3</sub> ))
	7439-95-4	MAGNESIUM
	1309-48-4	MAGNESIUM OXIDE (MGO)
E	109-77-3	MALONONITRILE
E	12427-38-2	MANEB
*E	7439-96-5	MANGANESE
	1317-35-7	MANGANESE TETROXIDE
	12079-65-1	MANGANESE, TRICARBONYL(ETA,5-2,4-CYCLOPENTADIEN-1-YL)-
E	12108-13-3	MANGANESE, TRICARBONYL(1,2,3,4,5-ETA)-1-METHYL-2,4-CYCLOPENTADIEN-1-YL)-
S		MANUFACTURE OF MAGENTA
	59355-75-8	MAPP
E	51-75-2	MECHLORETHAMINE
E	108-78-1	MELAMINE
E	950-10-7	MEPHOSFOLAN
E	1600-27-7	MERCURIC ACETATE
E	7487-94-7	MERCURIC CHLORIDE
E	21908-53-2	MERCURIC OXIDE
*E	7439-97-6	MERCURY
E		MERCURY ALKYL
E	592-04-1	MERCURY CYANIDE (HG(CN) <sub>2</sub> )
E		MERCURY NON-ALKYL, VAPOR
E	62-38-4	MERCURY, (ACETATO-O)PHENYL-
E		MERCURY, ARYL AND INORGANIC COMPOUNDS
	37273-91-9	METALDEHYDE
E	7785-84-4	METAPHOSPHORIC ACID (H <sub>3</sub> P <sub>3</sub> O <sub>9</sub> ), TRISODIUM SALT
E	10124-56-8	METAPHOSPHORIC ACID (H <sub>6</sub> P <sub>6</sub> O <sub>18</sub> ), HEXASODIUM SALT
E	10476-95-6	METHACROLEIN DIACETATE
E	760-93-0	METHACRYLIC ANHYDRIDE
E	920-46-7	METHACRYLOYL CHLORIDE
E	30674-80-7	METHACRYLOYLOXYETHYL ISOCYANATE
E	74-89-5	METHANAMINE
E	124-40-3	METHANAMINE, N-METHYL-
ES	62-75-9	METHANAMINE, N-METHYL-N-NITROSO-
E	75-50-3	METHANAMINE, N,N-DIMETHYL-
	74-82-8	METHANE

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## HAZARDOUS SUBSTANCE LIST

*ES	CAS NO.	SUBSTANCE NAME
E	74-83-9	METHANE, BROMO-
E	74-97-5	METHANE, BROMOCHLORO-
E	75-27-4	METHANE, BROMODICHLORO-
E	75-63-8	METHANE, BROMOTRIFLUORO-
E	74-87-3	METHANE, CHLORO-
E	75-45-6	METHANE, CHLORODIFLUORO-
ES	107-30-2	METHANE, CHLOROMETHOXY-
E	334-88-3	METHANE, DIAZO-
E	74-95-3	METHANE, DIBROMO-
E	124-48-1	METHANE, DIBROMOCHLORO-
E	75-61-6	METHANE, DIBROMODIFLUORO-
ES	75-09-2	METHANE, DICHLORO-
E	75-71-8	METHANE, DICHLORODIFLUORO-
E	75-43-4	METHANE, DICHLOROFUORO-
E	109-87-5	METHANE, DIMETHOXY-
ES	74-88-4	METHANE, IODO-
E	624-83-9	METHANE, ISOCYANATO-
E	75-52-5	METHANE, NITRO-
E	115-10-6	METHANE, OXYBIS-
ES	542-88-1	METHANE, OXYBIS(CHLORO-
E	558-13-4	METHANE, TETRABROMO-
ES	36-23-5	METHANE, TETRACHLORO-
E	509-14-8	METHANE, TETRANITRO-
E	75-18-3	METHANE, THIOBIS-
E	75-25-2	METHANE, TRIBROMO-
ES	67-66-3	METHANE, TRICHLORO-
E	75-69-4	METHANE, TRICHLOROFLUORO-
E	76-06-2	METHANE, TRICHLORONITRO-
E	75-47-8	METHANE, TRIODO-
E	594-42-3	METHANESULFENYL CHLORIDE, TRICHLORO-
ES	62-50-0	METHANESULFONIC ACID, ETHYL ESTER
ES	66-27-3	METHANESULFONIC ACID, METHYL ESTER
E	558-25-8	METHANESULFONYL FLUORIDE
E	74-93-1	METHANETHIOL
S	55738-54-0	METHANIMIDAMIDE, N,N-DIMETHYL-N'-[5-[2-(5-NITRO-2-FURANYL)ETHENYL] 1,3,4-OXADIAZOL-2-YL], (E)-
E	67-56-1	METHANOL
S	590-96-5	METHANOL, (METHYL-ONN-AZOXY)-
S	592-62-1	METHANOL, (METHYL-ONN-AZOXY)-, ACETATE (ESTER)
S	794-93-4	METHANOL, [6-[2-(5-NITRO-2-FURANYL)ETHENYL]-1,2,4-TRIAZIN-3-YL]JIMINO]BIS-
E	124-41-4	METHANOL, SODIUM SALT
ES	90-94-8	METHANONE, BIS[4-(DIMETHYLAMINO)PHENYL]-
S		METHOXSALEN WITH ULTRA-VIOLET A THERAPY
E	151-38-2	METHOXYETHYLMERCURIC ACETATE
E	79-22-1	METHYL CHLOROFORMATE
E	624-92-0	METHYL DISULFIDE
E	556-61-6	METHYL ISOTHIOCYANATE
E	3735-23-7	METHYL PHENKAPTON
E	676-97-1	METHYL PHOSPHONIC DICHLORIDE
E	1634-04-4	METHYL TERT-BUTYL ETHER
E	556-64-9	METHYL THIOCYANATE
E	80-63-7	METHYL 2-CHLOROACRYLATE
E	502-39-6	METHYLMERCURIC DICYANAMIDE
E	1129-41-5	METOL CARB
E	12001-26-2	MICA-GROUP MINERALS
		MINERAL OIL MIST
		MINERAL WOOL FIBER
	7439-98-7	MOLYBDENUM
E	1313-27-5	MOLYBDENUM TRIOXIDE
		MONO-(TRICHLORO) TETRA (MONOPOTASSIUM
		DICHLORO)-PENTA-S-TRIAZINE-TRIONE
		MONOCHLORO-S-TRIAZINETRIONE ACID
		MONOMETHYL ANILINE

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RIGHT-TO-KNOW

Pt. XIII

*ES	CAS NO.	SUBSTANCE NAME
S		MOPP (COMBINED THERAPY WITH NITROGEN MUSTARD, VINCRISTINE, PROCARBAZINE, AND PR EDISONONE) AND OTHER COMBINED CHEMOTHERAPY INCLUDING ALKYLATING AGENTS
	110-91-8	MORPHOLINE
	141-91-3	MORPHOLINE, 2,6-DIMETHYL-
	1696-20-4	MORPHOLINE, 4-ACETYL-
	100-74-3	MORPHOLINE, 4-ETHYL-
	109-02-4	MORPHOLINE, 4-METHYL-
ES	59-89-2	MORPHOLINE, 4-NITROSO-
	92-53-5	MORPHOLINE, 4-PHENYL-
E	2763-96-4	MOTOR FUEL ANTIKNOCK COMPOUNDS
	8030-30-6	MUSCIMOL
		NAPHTHA
		NAPHTHA V.M. + P., HIGH FLASH
		NAPHTHA V.M. + P., REGULAR
		NAPHTHA V.M. + P., 50 DEGREES FLASH
		NAPHTHA 49 DEGREE BE-COAL TAR TYPE
E	91-20-3	NAPHTHALENE
	73090-68-3	NAPHTHALENE, (1,1-DIMETHYLETHYL)-1,2,3,4-TETRAHYDRO-
	91-17-8	NAPHTHALENE, DECAHYDRO-
E	1335-87-1	NAPHTHALENE, HEXACHLORO-
E	2234-13-1	NAPHTHALENE, OCTACHLORO-
	1321-64-8	NAPHTHALENE, PENTACHLORO-
	1320-27-0	NAPHTHALENE, PENTYL-
	1335-88-2	NAPHTHALENE, TETRACHLORO-
	1321-65-9	NAPHTHALENE, TRICHLORO-
	90-12-0	NAPHTHALENE, 1-METHYL-
	119-64-2	NAPHTHALENE, 1,2,3,4-TETRAHYDRO-
E	91-58-7	NAPHTHALENE, 2-CHLORO-
E	1338-24-5	NAPHTHENIC ACIDS
ES	192-65-4	NAPHTHO[1,2,3,4-DEF]CHRYSENE
	8006-14-2	NATURAL GAS
	7440-01-9	NEON
*ES	7440-02-0	NICKEL
ES	13463-39-3	NICKEL CARBONYL (Ni(CO) <sub>4</sub> ), (T-4)
E		NICKEL CATALYST
E	37211-05-5	NICKEL CHLORIDE
E	7718-54-9	NICKEL CHLORIDE (NiCl <sub>2</sub> )
E	557-19-7	NICKEL CYANIDE
E	11113-74-9	NICKEL HYDROXIDE
E	12054-48-7	NICKEL HYDROXIDE
ES	11099-02-8	NICKEL OXIDE
ES	1313-99-1	NICKEL OXIDE (NiO)
ES	1314-06-3	NICKEL OXIDE (Ni <sub>2</sub> O <sub>3</sub> )
ES		NICKEL REFINING
ES	12035-72-2	NICKEL SULFIDE (NiS <sub>2</sub> )
E		NICKEL SULFIDE ROASTING FUME AND DUST
S	1271-28-9	NICKELOCENE
E	65-30-5	NICOTINE SULFATE
E	7697-37-2	NITRIC ACID
F	6484-52-2	NITRIC ACID AMMONIUM SALT
	7757-79-1	NITRIC ACID POTASSIUM SALT
E	7761-88-8	NITRIC ACID SILVER(I+) SALT
	7631-99-4	NITRIC ACID SODIUM SALT
E	10022-31-8	NITRIC ACID, BARIUM SALT
E	13597-99-4	NITRIC ACID, BERYLLIUM SALT
E	7787-55-5	NITRIC ACID, BERYLLIUM SALT, TRIHYDRATE
	928-45-0	NITRIC ACID, BUTYL ESTER
	10141-05-6	NITRIC ACID, COBALT(2+) SALT
E	3251-23-8	NITRIC ACID, COPPER(2+) SALT
	625-58-1	NITRIC ACID, ETHYL ESTER
E	10421-48-4	NITRIC ACID, IRON(3+) SALT
E	10099-74-8	NITRIC ACID, LEAD(2+) SALT
	10377-60-3	NITRIC ACID, MAGNESIUM SALT
E	10415-75-5	NITRIC ACID, MERCURY(I+) SALT

\*—ANY COMPOUND OF THIS SUBSTANCE IS ALSO AN ENVIRONMENTAL HAZARD  
 E—ENVIRONMENTAL HAZARD  
 S—SPECIAL HAZARDOUS SUBSTANCE

Ch. 323 HAZARDOUS SUBSTANCE LIST

*ES	CAS NO.	SUBSTANCE NAME
E	7782-86-7	NITRIC ACID, MERCURY(1+) SALT, MONOHYDRATE
E	10045-94-0	NITRIC ACID, MERCURY(2+) SALT
E	14216-75-2	NITRIC ACID, NICKEL SALT
E	13138-45-9	NITRIC ACID, NICKEL(2+) SALT
	1002-16-0	NITRIC ACID, PENTYL ESTER
	627-13-4	NITRIC ACID, PROPYL ESTER
	10042-76-9	NITRIC ACID, STRONTIUM SALT
	13823-29-5	NITRIC ACID, THORIUM(4+) SALT
E	15905-86-9	NITRIC ACID, URANIUM SALT
E	7779-88-6	NITRIC ACID, ZINC SALT
E	13746-89-9	NITRIC ACID, ZIRCONIUM(4+) SALT
		NITRIC ETHER
	7727-37-9	NITROGEN
	7783-54-2	NITROGEN FLUORIDE (NF3)
E	10102-43-9	NITROGEN OXIDE (NO)
E	10102-44-0	NITROGEN OXIDE (NO2)
	12033-49-7	NITROGEN OXIDE (NO3)
	10544-73-7	NITROGEN OXIDE (N2O3)
E	10544-72-6	NITROGEN OXIDE (N2O4)
E		NITROPHENOLS
E		NITROSAMINES
	109-95-5	NITROUS ACID, ETHYL-ESTER
E	7832-00-0	NITROUS ACID, SODIUM SALT
	10024-97-2	NITROUS OXIDE
	111-84-2	NONANE
	27215-95-8	NONENE
E	991-42-4	NORBORMIDE
E	3288-58-2	O,O-DIETHYL S-METHYL DITHIOPHOSPHATE
E	7428-48-0	OCTADECANOIC ACID, LEAD SALT
E	1072-35-1	OCTADECANOIC ACID, LEAD(2+) SALT
E	557-05-1	OCTADECANOIC ACID, ZINC SALT
	111-65-9	OCTANE
	3221-61-2	OCTANE, 2-METHYL-
	2216-33-3	OCTANE, 3-METHYL-
	2216-34-4	OCTANE, 4-METHYL-
	106-32-1	OCTANOIC ACID, ETHYL ESTER
	111-64-8	OCTANOYL CHLORIDE
	8001-86-3	OILS, BOLEKO
	8008-51-3	OILS, CAMPHOR
	8016-28-2	OILS, LARD
	8807-40-7	OILS, MUSTARD
	68334-28-1	OILS, VEGETABLE, HYDROGENATED
		OLEO OIL
		ORGANO(ALKYL)MERCURY
E		ORGANORHODIUM COMPLEX (PMN-82-147)
E	20816-12-0	OSMIUM OXIDE (OSO4), (T-4)-
E	630-60-4	OUABAIN
E	23135-22-0	OXAMYL
E	78-71-7	OXETANE, 3,3-BIS(CHLOROMETHYL)-
ES	75-21-8	OXIRANE
	2426-08-6	OXIRANE, (BUTOXYMETHYL)-
ES	106-89-8	OXIRANE, (CHLOROMETHYL)-
	122-60-1	OXIRANE, (PHENOXYMETHYL)-
	4016-14-2	OXIRANE, [(1-METHYLETHOXY)METHYL]-
	106-92-3	OXIRANE, [(2-PROPENYLOXY)METHYL]-
	930-22-3	OXIRANE, ETHENYL-
E	106-88-7	OXIRANE, ETHYL-
ES	75-56-9	OXIRANE, METHYL-
E	96-09-3	OXIRANE, PHENYL-
E	2238-07-5	OXIRANE, 2,2'-[OXYBIS(METHYLENE)]BIS-
S	765-34-4	OXIRANECARBOXYLALDEHYDE
E	556-52-5	OXIRANEMETHANOL
E	2497-07-6	OXYDISULFOTON
	7782-44-7	OXYGEN
	7783-41-7	OXYGEN FLUORIDE (OF2)

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*ES	CAS NO.	SUBSTANCE NAME
E	10028-15-6	OZONE
	8002-74-2	PARAFFIN WAXES AND HYDROCARBON WAXES
E	30525-89-4	PARAFORMALDEHYDE
	8002-03-7	PARTICULATE POLYCYCLIC AROMATIC HYDROCARBONS
		PEANUT OIL
		PENT-ACETATE
E	19624-22-7	PENTABORANE(9)
E	76-01-7	PENTACHLOROETHANE
E	2570-26-5	PENTADECYLAMINE
	110-62-3	PENTANAL
	73513-30-1	PENTANAL, METHYL-
	123-15-9	PENTANAL, 2-METHYL-
	32749-94-3	PENTANAL, 2,3-DIMETHYL-
	109-66-0	PENTANE
	110-53-2	PENTANE, 1-BROMO-
	543-59-9	PENTANE, 1-CHLORO-
	872-10-6	PENTANE, 1,1'-THIOBIS-
	628-76-2	PENTANE, 1,5-DICHLORO-
	107-83-5	PENTANE, 2-METHYL-
	564-02-3	PENTANE, 2,2,3-TRIMETHYL-
	7154-79-2	PENTANE, 2,2,3,3-TETRAMETHYL-
	1186-53-4	PENTANE, 2,2,3,4-TETRAMETHYL-
	540-84-1	PENTANE, 2,2,4-TRIMETHYL-
	565-59-3	PENTANE, 2,3-DIMETHYL-
	560-21-4	PENTANE, 2,3,3-TRIMETHYL-
	108-08-7	PENTANE, 2,4-DIMETHYL-
	609-26-7	PENTANE, 3-ETHYL-2-METHYL-
	1068-87-7	PENTANE, 3-ETHYL-3,4-DIMETHYL-
	96-14-0	PENTANE, 3-METHYL-
	760-21-4	PENTANE, 3-METHYLENE-
	1067-20-5	PENTANE, 3,3-DIETHYL-
	111-30-8	PENTANEDIAL
	109-52-4	PENTANOIC ACID
	25167-70-8	PENTENE, 2,4,4-TRIMETHYL-
		PERACETIC ACID DILUTED WITH 60 OF ACETIC ACID
	7601-90-3	PERCHLORIC ACID
	7790-98-9	PERCHLORIC ACID, AMMONIUM SALT
	10034-81-8	PERCHLORIC ACID, MAGNESIUM SALT
	7778-74-7	PERCHLORIC ACID, POTASSIUM SALT
	7601-89-0	PERCHLORIC ACID, SODIUM SALT
	7616-94-6	PERCHLORYL FLUORIDE
		PERLITE DUST
	13446-10-1	PERMANGANIC ACID (HMNO4), AMMONIUM SALT
E	7722-64-7	PERMANGANIC ACID (HMNO4), POTASSIUM SALT
	105-74-8	PEROXIDE, BIS(1-OXODODECYL)
	110-05-4	PEROXIDE, BIS(1,1-DIMETHYLETHYL)
E	110-22-5	PEROXIDE, DIACETYL
	94-36-0	PEROXIDE, DIBENZOYL
	628-37-5	PEROXIDE, DIETHYL
	105-64-6	PEROXYDICARBONIC ACID, BIS(1-METHYLETHYL) ESTER
	7727-21-1	PEROXYDISULFURIC ACID ((HO)S(O)2)2O2), DIPOTASSIUM SALT
	8002-05-9	PETROLEUM
		PETROLEUM DISTILLATES
	68476-85-7	PETROLEUM GASES, LIQUEFIED
E	85-01-8	PHENANTHRENE
E	108-95-2	PHENOL
	1333-13-7	PHENOL, (1,1-DIMETHYLETHYL)3-METHYL-
S	53894-28-3	PHENOL, [(2-AMINOETHYL)AMINO]METHYL-
	73090-69-4	PHENOL, CHLORO-4-(1,1-DIMETHYLPROPYL)-
E	1300-71-6	PHENOL, DIMETHYL-
E	25550-58-7	PHENOL, DINITRO-
E	1319-77-3	PHENOL, METHYL-
E	25154-55-6	PHENOL, NITRO-
	25154-52-3	PHENOL, NONYL-
E	87-86-5	PHENOL, PENTACHLORO-

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*ES	CAS NO.	SUBSTANCE NAME
E	25167-82-2	PHENOL, TRICHLORO-
E	114-26-1	PHENOL, 2-(1-METHYLETHOXY)-, METHYL CARBAMATE
	89-72-5	PHENOL, 2-(1-METHYLPROPYL)-
E	95-57-8	PHENOL, 2-CHLORO-
	98-28-2	PHENOL, 2-CHLORO-4-(1,1-DIMETHYLETHYL)-
	42350-99-2	PHENOL, 2-CHLORO-4,6-BIS(1,1-DIMETHYLPROPYL)-
	119-42-6	PHENOL, 2-CYCLOHEXYL-
E	95-48-7	PHENOL, 2-METHYL-
E	534-52-1	PHENOL, 2-METHYL-4,6-DINITRO-
E	88-75-5	PHENOL, 2-NITRO-
	136-81-2	PHENOL, 2-PENTYL-
E	4418-66-0	PHENOL, 2,2'-THIOBIS(4-CHLORO-6-METHYL)-
E	15950-66-0	PHENOL, 2,3,4-TRICHLORO-
E	933-78-8	PHENOL, 2,3,5-TRICHLORO-
E	933-75-5	PHENOL, 2,3,6-TRICHLORO-
E	120-83-2	PHENOL, 2,4-DICHLORO-
E	105-67-9	PHENOL, 2,4-DIMETHYL-
E	51-28-5	PHENOL, 2,4-DINITRO-
	138-00-1	PHENOL, 2,4-DIPENTYL-
E	95-95-4	PHENOL, 2,4,5-TRICHLORO-
ES	88-06-2	PHENOL, 2,4,6-TRICHLORO-
E	88-89-1	PHENOL, 2,4,6-TRINITRO-
E	329-71-5	PHENOL, 2,5-DINITRO-
	128-37-0	PHENOL, 2,6-BIS(1,1-DIMETHYLETHYL)-4-METHYL-
E	573-56-8	PHENOL, 2,6-DINITRO-
E	64-00-6	PHENOL, 3-(1-METHYLETHYL)-, METHYL CARBAMATE
E	108-39-4	PHENOL, 3-METHYL-
E	554-84-7	PHENOL, 3-NITRO-
E	609-19-8	PHENOL, 3,4,5-TRICHLORO-
E	2032-65-7	PHENOL, 3,5-DIMETHYL-4-(METHYLTHIO)-, METHYL CARBAMATE
E	315-18-4	PHENOL, 4-(DIMETHYLAMINO)-3,5-DIMETHYL-, METHYL CARBAMATE (ESTER)
	98-27-1	PHENOL, 4-(1,1-DIMETHYLETHYL)-2-METHYL-
	80-46-6	PHENOL, 4-(1,1-DIMETHYLPROPYL)-
E	106-48-9	PHENOL, 4-CHLORO-
E	59-50-7	PHENOL, 4-CHLORO-3-METHYL-
	123-07-9	PHENOL, 4-ETHYL-
	150-76-5	PHENOL, 4-METHOXY-
E	106-44-5	PHENOL, 4-METHYL-
E	100-02-7	PHENOL, 4-NITRO-
ES	56-53-1	PHENOL, 4,4'-(1,2-DIETHYL-1,2-ETHENEDIYL)BIS-, (E)-
E	96-69-5	PHENOL, 4,4'-THIOBIS[2-(1,1-DIMETHYLETHYL)-5-METHYL-
E	97-18-7	PHENOL, 2,2'-THIOBIS(4,6-DICHLORO-
E	58-90-2	PHENOL, 2,3,4,6-TETRACHLORO-
E	58-36-6	PHENOARSINE, 10,10'-OXYDI-
S		PHENOXYACETIC ACID HERBICIDES
E	696-28-6	PHENYL DICHLOROARSINE
		PHENYL ETHER-BIPHENYL MIXTURE
E	59-88-1	PHENYLHYDRAZINE HYDROCHLORIDE
E	2097-19-0	PHENYLSILATRANE
E	103-85-5	PHENYLTHIOUREA
E	947-02-4	PHOSPLAN
E	732-11-6	PHOSMET
E	7803-51-2	PHOSPHINE
	638-21-1	PHOSPHINE, PHENYL-
E	52-68-6	PHOSPHONIC ACID, (2,2,2-TRICHLORO-1-HYDROXYETHYL)-, DIMETHYL ESTER
	1809-19-4	PHOSPHONIC ACID, DIBUTYL ESTER
E	944-22-9	PHOSPHONODITHIOIC ACID, ETHYL-, O-ETHYL S-PHENYL ESTER
E	2703-13-1	PHOSPHONOTHIOIC ACID, METHYL-, O-ETHYL O-(4-(METHYLTHIO)PHENYL)ESTER
E	2665-30-7	PHOSPHONOTHIOIC ACID, METHYL-, O-(4-NITROPHENYL)O-PHENYL ESTER
E	50782-69-9	PHOSPHONOTHIOIC ACID, METHYL-, S-(2-(BIS(1-METHYLETHYL)AMINO)ETHYL) O-ETHYL ESTER
E	2104-64-5	PHOSPHONOTHIOIC ACID, PHENYL-, O-ETHYL O-(4-NITROPHENYL) ESTER
E	22224-92-6	PHOSPHORAMIDIC ACID, (1-METHYLETHYL)-, ETHYL 3-METHYL-4-(METHYLTHIO)PHENYL ESTER

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*ES	CAS NO.	SUBSTANCE NAME
	299-86-5	PHOSPHORAMIDIC ACID, METHYL-, 2-CHLORO-4-(1,1-DIMETHYLETHYL)PHENYL METHYL ESTER
F	4104-14-7	PHOSPHORAMIDOTHIOIC ACID, (1-IMINOETHYL)-, O,O-BIS(4-CHLOROPHENYL) ESTER
E	10265-92-6	PHOSPHORAMIDOTHIOIC ACID, O,S-DIMETHYL ESTER
F	10026-13-8	PHOSPHORANE, PENTACHLORO-
F	7664-38-2	PHOSPHORIC ACID
	126-73-8	PHOSPHORIC ACID TRIBUTYL ESTER
ES	35089-00-0	PHOSPHORIC ACID, BERYLLIUM SALT
ES	13598-15-7	PHOSPHORIC ACID, BERYLLIUM SALT (1:1)
ES	13598-26-0	PHOSPHORIC ACID, BERYLLIUM SALT (2:3)
	107-66-4	PHOSPHORIC ACID, DIBUTYL ESTER
F	6923-22-4	PHOSPHORIC ACID, DIMETHYL 1-METHYL-3-(METHYLAMINO)-3-OXO-1-PROPENYL ESTER, (E)
E	3254-63-5	PHOSPHORIC ACID, DIMETHYL 4-(METHYLTHIO)PHENYL ESTER
E	7558-79-4	PHOSPHORIC ACID, DISODIUM SALT
E	10039-32-4	PHOSPHORIC ACID, DISODIUM SALT, DODECAHYDRATE
E	10140-65-5	PHOSPHORIC ACID, DISODIUM SALT, HYDRATE
ES	7446-27-7	PHOSPHORIC ACID, LEAD(2+) SALT (2:3)
	18351-85-4	PHOSPHORIC ACID, MONO(2-METHYLPHENYL) ESTER
	115-86-6	PHOSPHORIC ACID, TRIPHENYL ESTER
E	78-30-8	PHOSPHORIC ACID, TRIS(2-METHYLPHENYL) ESTER
E	7601-54-9	PHOSPHORIC ACID, TRISODIUM SALT
E	10361-89-4	PHOSPHORIC ACID, TRISODIUM SALT, DECAHYDRATE
E	10101-89-0	PHOSPHORIC ACID, TRISODIUM SALT, DODECAHYDRATE
E	300-76-5	PHOSPHORIC ACID, 1,2-DIBROMO-2,2-DICHLOROETHYL DIMETHYL ESTER
E	470-90-6	PHOSPHORIC ACID, 2-CHLORO-1-(2,4-DICHLOROPHENYLETHENYL) DIETHYL ESTER
E	13171-21-6	PHOSPHORIC ACID, 2-CHLORO-3-(DIETHYLAMINO)-1-METHYL-3-OXO-1-PROPENYL DIMETHYL ESTER
E	62-73-7	PHOSPHORIC ACID, 2,2-DICHLOROETHENYL DIMETHYL ESTER
E	141-66-2	PHOSPHORIC ACID, 3-(DIMETHYLAMINO)-1-METHYL-3-OXO-1-PROPENYL DIMETHYL ESTER, (E)
ES	680-31-9	PHOSPHORIC TRIAMIDE, HEXAMETHYL-
	35400-43-2	PHOSPHORODITHIOIC ACID, O-ETHYL O-[4-(METHYLTHIO)PHENYL] S-PROPYL ESTER
E	13194-48-4	PHOSPHORODITHIOIC ACID, O-ETHYL S,S-DIPROPYL ESTER
E	298-02-2	PHOSPHORODITHIOIC ACID, O,O-DIETHYL S-[(ETHYLTHIO)METHYL] ESTER
E	298-04-4	PHOSPHORODITHIOIC ACID, O,O-DIETHYL S-[2-(ETHYLTHIO)ETHYL] ESTER
E	86-50-0	PHOSPHORODITHIOIC ACID, O,O-DIMETHYL S-[4-OXO-1,2,3-BENZOTRIAZIN-3(4H)-YL]METHYL] ESTER
E	950-37-8	PHOSPHORODITHIOIC ACID, S-[5-METHOXY-2-OXO-1,3,4-THIAZOL-3(2H)-YL]METHYL] O,O-DIMETHYL ESTER
E	563-12-2	PHOSPHORODITHIOIC ACID, S,S'-METHYLENE O,O,O',O'-TETRAETHYL ESTER
E	78-34-2	PHOSPHORODITHIOIC ACID, S,S'-1,4-DIOXANE-2,3-DIYL O,O,O',O'-TETRAETHYL ESTER
E	56-72-4	PHOSPHOROTHIOIC ACID, O-(3-CHLORO-4-METHYL-2-OXO-2H-1-BENZOPYRAN-7-YL) O,O-DIETHYL ESTER
	8022-00-2	PHOSPHOROTHIOIC ACID, O-[2-(ETHYLTHIO)ETHYL] O,O-DIMETHYL ESTER, MIXT. WITH S-[2-(ETHYLTHIO)ETHYL] O,O-DIMETHYL PHOSPHOROTHIOATE
E	2921-88-2	PHOSPHOROTHIOIC ACID, O,O-DIETHYL O-(3,5,6-TRICHLORO-2-PYRIDINYL) ESTER
E	56-38-2	PHOSPHOROTHIOIC ACID, O,O-DIETHYL O-(4-NITROPHENYL) ESTER
E	8065-48-3	PHOSPHOROTHIOIC ACID, O,O-DIETHYL O-[2-(ETHYLTHIO)ETHYL] ESTER, MIXT. WITH O,O-DIETHYL S-[2-(ETHYLTHIO)ETHYL] PHOSPHOROTHIOATE
E	115-90-2	PHOSPHOROTHIOIC ACID, O,O-DIETHYL O-[4-(METHYLSULFINYL)PHENYL] ESTER
E	333-41-5	PHOSPHOROTHIOIC ACID, O,O-DIETHYL O-[6-METHYL-2-(1-METHYLETHYL)-4-PYRIDINYL] ESTER
	299-84-3	PHOSPHOROTHIOIC ACID, O,O-DIMETHYL O-(2,4,5-TRICHLOROPHENYL) ESTER
F	298-00-0	PHOSPHOROTHIOIC ACID, O,O-DIMETHYL O-(4-NITROPHENYL) ESTER
	55-38-9	PHOSPHOROTHIOIC ACID, O,O-DIMETHYL O-[3-METHYL-4-(METHYLTHIO)PHENYL] ESTER
E	2587-90-8	PHOSPHOROTHIOIC ACID, O,O-DIMETHYL-S-[2-METHYLTHIO]ETHYL ESTER
	3383-96-8	PHOSPHOROTHIOIC ACID, O,O'-(THIODI-4,1-PHENYLENE) O,O,O',O'-TETRAMETHYL ESTER
	109-47-7	PHOSPHOROUS ACID, DIBUTYL ESTER

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 S—SPECIAL HAZARDOUS SUBSTANCE

*ES	CAS NO.	SUBSTANCE NAME
	102-85-2	PHOSPHOROUS ACID, TRIBUTYL ESTER
	121-45-9	PHOSPHOROUS ACID, TRIMETHYL ESTER
E	7719-12-2	PHOSPHOROUS TRICHLORIDE
E	7723-14-0	PHOSPHORUS
E	1314-56-3	PHOSPHORUS PENTOXIDE
E	1314-80-3	PHOSPHORUS SULFIDE (P2S5)
	1314-85-8	PHOSPHORUS SULFIDE (P4S3)
E	10025-87-3	PHOSPHORYL CHLORIDE
E		PHTHALATE ESTERS
E	57-47-6	PHYSTOSTIGMINE
E	57-64-7	PHYSTOSTIGMINE, SALICYLATE (1:1)
E	124-87-8	PICROTOXIN
		PINE TAR OIL
	110-85-0	PIPERAZINE
	142-64-3	PIPERAZINE, DIHYDROCHLORIDE
	109-01-3	PIPERAZINE, 1-METHYL-
E	110-89-4	PIPERIDINE
ES	106-75-4	PIPERIDINE, 1-NITROSO-
	104-89-2	PIPERIDINE, 5-ETHYL-2-METHYL-
E	5281-13-0	PIPROTAL
E	23505-41-1	PIRIMIFOS-ETHYL
	26499-65-0	PLASTER OF PARIS
	7440-06-4	PLATINUM
		PLATINUM SOLUBLE SALTS
S	15663-27-1	PLATINUM, DIAMMINEDICHLORO-, (SP-4-2)
E	78-00-2	PLUMBANE, TETRAETHYL-
E	75-74-1	PLUMBANE, TETRAMETHYL-
	9002-81-7	POLY(OXYMETHYLENE)
	9015-98-9	POLY(OXYMETHYLENE)-1,2-ETHANEDIYL], .ALPHA.-[2,4-DICHLOROPHENOXY]ACETYL]-
E	53467-11-1	POLY(OXYMETHYLENE)-1,2-ETHANEDIYL], .ALPHA.-[2,4-DICHLOROPHENOXY]ACETYL]-
		OMEGA-.BUTOXY-
E		POLYBROMINATED BIPHENYLS (PBBS)
		POLYCHLOROBIPHENYLS
E		POLYNUCLEAR AROMATIC HYDROCARBONS
	7440-09-7	POTASSIUM
	11135-81-2	POTASSIUM ALLOY, NONBASE, K,NA
E	151-50-8	POTASSIUM CYANIDE (K(CN))
E	1310-58-3	POTASSIUM HYDROXIDE (K(OH))
	17014-71-0	POTASSIUM PEROXIDE (K2O2)
E	506-61-6	POTASSIUM SILVER CYANIDE
	37248-34-3	POTASSIUM SULFIDE
	1312-73-8	POTASSIUM SULFIDE (K2S)
		PRECIPITATED SILICA
S	57-83-0	PREGN-4-ENE-3,20-DIONE
E	2631-37-0	PROMECARB
E	123-38-6	PROPANAL
E	78-84-2	PROPANAL, 2-METHYL-
E	116-06-3	PROPANAL, 2-METHYL-2-(METHYLTHIO)-, O-[(METHYLAMINO)CARBONYL]OXIME
	2806-85-1	PROPANAL, 3-ETHOXY-
	74-98-6	PROPANE
	109-53-5	PROPANE, 1-(ETHENYLOXY)-2-METHYL-
	106-94-5	PROPANE, 1-BROMO-
	540-54-5	PROPANE, 1-CHLORO-
	600-23-9	PROPANE, 1-CHLORO-1-NITRO-
	513-36-0	PROPANE, 1-CHLORO-2-METHYL-
	628-32-0	PROPANE, 1-ETHOXY-
	557-17-5	PROPANE, 1-METHOXY-
	108-03-2	PROPANE, 1-NITRO-
E	78-99-9	PROPANE, 1,1-DICHLORO-
	595-44-8	PROPANE, 1,1-DICHLORO-1-NITRO-
	111-43-3	PROPANE, 1,1'-OXYBIS-
ES	96-12-4	PROPANE, 1,2-DIBROMO-3-CHLORO-
E	78-87-5	PROPANE, 1,2-DICHLORO-
E	96-18-4	PROPANE, 1,2,3-TRICHLORO-
E	142-28-9	PROPANE, 1,3-DICHLORO-

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E—ENVIRONMENTAL HAZARD  
S—SPECIAL HAZARDOUS SUBSTANCE



*ES	CAS NO.	SUBSTANCE NAME
	926-65-8	PROPANE, 2-(ETHENYLOXY)-
	75-29-6	PROPANE, 2-CHLORO-
	507-20-0	PROPANE, 2-CHLORO-2-METHYL-
	594-71-8	PROPANE, 2-CHLORO-2-NITRO-
	75-28-5	PROPANE, 2-METHYL-
ES	79-46-9	PROPANE, 2-NITRO-
	463-82-1	PROPANE, 2,2-DIMETHYL-
	108-20-3	PROPANE, 2,2'-OXYBIS-
	63283-80-7	PROPANE, 2,2'-OXYBIS[DICHLORO-
E	39638-32-9	PROPANE, 2,2'-OXYBIS[2-CHLORO-
	2698-41-1	PROPANEDINITRILE, [1,2-CHLOROPHENYL]METHYLENE]-
E	107-12-0	PROPANENITRILE
E	78-97-7	PROPANENITRILE, 2-HYDROXY-
E	75-86-5	PROPANENITRILE, 2-HYDROXY-2-METHYL-
E	78-82-0	PROPANENITRILE, 2-METHYL-
	78-67-1	PROPANENITRILE, 2,2'-AZOBIS[2-METHYL-
	702-03-4	PROPANENITRILE, 3-(CYCLOHEXYLAMINO)-
	109-78-4	PROPANENITRILE, 3-HYDROXY-
	110-67-8	PROPANENITRILE, 3-METHOXY-
	927-07-1	PROPANEPEROXIC ACID, 2,2-DIMETHYL-, 1,1-DIMETHYLETHYL ESTER
E	79-09-4	PROPANOIC ACID
E	123-62-6	PROPANOIC ACID, ANHYDRIDE
	590-01-2	PROPANOIC ACID, BUTYL ESTER
	105-38-4	PROPANOIC ACID, ETHENYL ESTER
	105-37-3	PROPANOIC ACID, ETHYL ESTER
	554-12-1	PROPANOIC ACID, METHYL ESTER
	106-36-5	PROPANOIC ACID, PROPYL ESTER
E	93-32-1	PROPANOIC ACID, 2-(2,4,5-TRICHLOROPHENOXY)-
E	32534-95-5	PROPANOIC ACID, 2-(2,4,5-TRICHLOROPHENOXY)-, ISOOCYL ESTER
	138-22-7	PROPANOIC ACID, 2-HYDROXY-, BUTYL ESTER
	97-44-3	PROPANOIC ACID, 2-HYDROXY-, ETHYL ESTER
	617-51-6	PROPANOIC ACID, 2-HYDROXY-, 1-METHYLETHYL ESTER
E	79-31-2	PROPANOIC ACID, 2-METHYL-
	97-62-1	PROPANOIC ACID, 2-METHYL-, ETHYL ESTER
S	3771-19-5	PROPANOIC ACID, 2-METHYL-2-[4-(1,2,3,4-TETRAHYDRO-1-NAPHTHALENYL)PHENOX Y]-
E	75-99-0	PROPANOIC ACID, 2,2-DICHLORO-
	10213-74-8	PROPANOIC ACID, 3-(2-ETHYLBUTOXY)-
	4324-38-3	PROPANOIC ACID, 3-ETHOXY-
	34590-94-8	PROPANOL, (2-METHOXYMETHYLETHOXY)-
	25265-71-8	PROPANOL, OXYBIS-
	79-03-8	PROPANOYL CHLORIDE
E	542-76-7	PROPIONITRILE, 3-CHLORO-
E	70-69-9	PROPIOPHENONE, 4'-AMINO-
E	109-61-5	PROPYL CHLOROFORMATE
		PROPYLENE GLYCOL MONOACRYLATE
E	2275-18-5	PROTHOATE
E	95-63-6	PSELDOCUMENE
E	109-08-0	PYRAZINE, METHYL-
E	129-00-0	PYRENE
E	8003-34-7	PYRETHRINS AND PYRETHROIDS
E	110-86-1	PYRIDINE
	1929-82-4	PYRIDINE, 2-CHLORO-6-(TRICHLOROMETHYL)-
	5408-74-2	PYRIDINE, 2-ETHENYL-5-ETHYL-
E	109-06-8	PYRIDINE, 2-METHYL-
E	54-11-5	PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL), (S)-
ES	16543-55-8	PYRIDINE, 3-(1-NITROSO-2-PYRROLIDINYL), (S)-
	108-89-4	PYRIDINE, 4-METHYL-
E	1124-33-0	PYRIDINE, 4-NITRO-, 1-OXIDE
E	104-90-5	PYRIDINE, 5-ETHYL-2-METHYL-
E	140-76-1	PYRIDINE, 2-METHYL-5-VINYL-
E	504-24-5	PYRIDINE, 4-AMINO-
E	53558-25-1	PYRIMINIL
		PYROXYLIN SOLUTION

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*ES	CAS NO.	SUBSTANCE NAME
	123-75-1	PYRROLIDINE
	120-94-5	PYRROLIDINE, 1-METHYL-
ES	930-55-2	PYRROLIDINE, 1-NITROSO-
	14808-60-7	QUARTZ (SiO <sub>2</sub> )
		QUARTZ DUST
		QUENCHING OIL
E	91-22-5	QUINOLINE
E	56-57-5	QUINOLINE, 4-NITRO-, 1-OXIDE
E		RADIIONUCLIDES
	7440-16-6	RHODIUM
		RHODIUM FUME
		ROSIN CORE SOLDER PYROLYSIS PRODUCTS
S		RUBBER INDUSTRY (MANUFACTURE)
		RUBBER SOLVENT
	1317-80-2	RUTILE (TiO <sub>2</sub> )
E	14167-18-1	SALCOMINE
E	107-44-8	SARIN
E	513-49-5	SEC-BUTYLAMINE
	108-84-9	SEC-HEXYL ACETATE
	41444-43-3	SEC-PENTANAMINE
E	10102-18-8	SELENIOS ACID, DISODIUM SALT
*E	7782-49-2	SELENIUM
E	7488-56-4	SELENIUM DISULFIDE
	7783-79-1	SELENIUM FLUORIDE (SEF <sub>6</sub> ), (OC-6-11)-
E	7446-08-4	SELENIUM OXIDE (SeO <sub>2</sub> )
E	7791-23-3	SELENIUM OXYCHLORIDE
ES	56093-45-9	SELENIUM SULFIDE
ES	7446-34-6	SELENIUM SULFIDE (SES)
E	7783-00-8	SELENIOS ACID
E	563-41-7	SEMICARBAZIDE HYDROCHLORIDE
S		SHALE OILS
S		SHALE OILS (CRUDE DISTILLATION FRACTIONS)
S		SHALE OILS (FRACTIONS OF HIGH TEMPERATURE)
S		SHALE OILS (HIGH TEMPERATURE CRUDE)
S		SHALE OILS (LOW TEMPERATURE CRUDE)
	7803-62-5	SILANE
E	3037-72-7	SILANE, (4-AMINOBUTYL)DIETHOXYMETHYL-
	7521-80-4	SILANE, BUTYLTRICHLORO-
	1609-19-4	SILANE, CHLORODIETHYL-
E	75-77-4	SILANE, CHLOROTRIMETHYL-
E	75-78-5	SILANE, DICHLORODIMETHYL-
	80-10-4	SILANE, DICHLORODIPHENYL-
	1789-58-8	SILANE, DICHLOROETHYL-
	75-54-7	SILANE, DICHLOROMETHYL-
	10025-78-2	SILANE, TRICHLORO-
	107-37-9	SILANE, TRICHLORO-2-PROPENYL-
	98-12-4	SILANE, TRICHLOROXYCLOHEXYL-
	75-94-5	SILANE, TRICHLOROETHENYL-
E	115-21-9	SILANE, TRICHLOROETHYL-
	5894-60-0	SILANE, TRICHLOROHEXADECYL-
E	75-79-6	SILANE, TRICHLOROMETHYL-
	112-04-9	SILANE, TRICHLOROCTADECYL-
	107-72-2	SILANE, TRICHLOROPENTYL-
E	98-13-5	SILANE, TRICHLOROPHENYL-
	141-57-1	SILANE, TRICHLOROPROPYL-
	7631-86-9	SILICA
	68853-54-9	SILICA AMORPHOUS DIATOMACEOUS EARTH (UNCALCINED)
		SILICA GEL
E	16919-19-0	SILICATE(2-), HEXAFLUORO-, DIAMMONIUM
E	16871-71-9	SILICATE(2-), HEXAFLUORO-, ZINC (1:1)
ES	15191-85-2	SILICIC ACID (H <sub>4</sub> SiO <sub>4</sub> ), BERYLLIUM SALT (1:2)
	78-10-4	SILICIC ACID (H <sub>4</sub> SiO <sub>4</sub> ), TETRAETHYL ESTER
	681-84-5	SILICIC ACID (H <sub>4</sub> SiO <sub>4</sub> ), TETRAMETHYL ESTER
S	75364-04-4	SILICIC ACID (H <sub>6</sub> Si <sub>2</sub> O <sub>7</sub> ), COBALT(2+) MAGNESIUM SALT (1:2:1)
	2157-42-8	SILICIC ACID (H <sub>6</sub> Si <sub>2</sub> O <sub>7</sub> ), HEXAETHYL ESTER

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*ES	CAS NO.	SUBSTANCE NAME
	4521-94-2	SILICIC ACID (H8S13O10), OCTAETHYL ESTER
	4421-95-8	SILICIC ACID (H8S13O10), OCTAMETHYL ESTER
ES	58500-38-2	SILICIC ACID, BERYLLIUM SALT
ES	39413-47-3	SILICIC ACID, BERYLLIUM ZINC SALT
	1344-95-2	SILICIC ACID, CALCIUM SALT
	11099-06-2	SILICIC ACID, ETHYL ESTER
	12002-26-5	SILICIC ACID, METHYL ESTER
	7440-21-3	SILICON
	409-21-2	SILICON CARBIDE (SiC)
	12327-32-1	SILICON CARBIDE (SiC <sub>3</sub> )
*E	7440-22-4	SILVER
E	506-64-9	SILVER CYANIDE
		SOAPSTONE DUST
E	7440-23-5	SODIUM
E	7784-46-5	SODIUM ARSENITE
E	26628-22-8	SODIUM AZIDE (Na(N <sub>3</sub> ))
E	124-65-2	SODIUM CACODYLATE
E	143-33-9	SODIUM CYANIDE (Na(CN))
E	1333-83-1	SODIUM FLUORIDE (Na(HF <sub>2</sub> ))
E	7681-49-4	SODIUM FLUORIDE (NaF)
E	7646-69-7	SODIUM HYDRIDE (NaH)
E	1310-73-2	SODIUM HYDROXIDE (Na(OH))
E	131-52-2	SODIUM PENTACHLOROPHENATE
E	1313-60-6	SODIUM PEROXIDE (Na <sub>2</sub> O <sub>2</sub> )
S		SODIUM SALT OF PHENYTOIN
E	13410-01-0	SODIUM SELENATE
E	7782-82-3	SODIUM SELENITE
E	7757-82-6	SODIUM SULFATE (SOLUTION)
E	16721-80-5	SODIUM SULFIDE (Na(SH))
E	10102-20-2	SODIUM TELLURITE
		SODIUM-POTASSIUM ALLOYS
S		SOLVENT (BENZENE) EXTRACTS OF MOST CARBON BLACKS
S		SOOT
S		SOOT (SHALE OIL SOOT EXTRACTS)
S		SOOTS (COAL SOOT EXTRACTS)
S		SOOTS, TARS AND OILS
S		SOOTS, TARS, AND MINERAL OILS
	8001-22-7	SOYBEAN OIL
		SPEARM OIL NO. 2
E	900-95-8	STANNANE, ACETOXYTRIPHENYL-
	7646-78-8	STANNANE, TETRACHLORO-
	594-27-4	STANNANE, TETRAMETHYL-
	595-90-4	STANNANE, TETRAPHENYL-
	13121-70-5	STANNANE, TRICYCLOHEXYLHYDROXY-
	9005-25-8	STARCH
	7803-52-3	STIBINE
E	7789-61-9	STIBINE, TRIBROMO-
E	10025-91-9	STIBINE, TRICHLORO-
E	7783-56-4	STIBINE, TRIFLUORO-
	8052-41-3	STODDARD SOLVENT
		STRONTIUM DICHROMATE
	1314-18-7	STRONTIUM PEROXIDE (Sr(O <sub>2</sub> ))
E	57-24-9	STRYCHNIDIN-10-ONE
E	60-41-3	STRYCHNINE, SULFATE
	1395-21-7	SUBTILISINS (PROTEOLYTIC ENZYMES AS 100 PERCENT PURE CRYSTALLINE ENZYME)
E	14017-41-5	SULFAMIC ACID, COBALT(2+) SALT (2:1)
E	7773-06-0	SULFAMIC ACID, MONOAMMONIUM SALT
E	3569-57-1	SULFOXIDE, 3-CHLOROPROPYL OCTYL
	7704-34-9	SULFUR
E	12771-08-3	SULFUR CHLORIDE
	10545-99-0	SULFUR CHLORIDE (SCL <sub>2</sub> )
	10025-67-9	SULFUR CHLORIDE (S <sub>2</sub> CL <sub>2</sub> )
E	7446-09-5	SULFUR DIOXIDE
E	7783-60-0	SULFUR FLUORIDE (SF <sub>4</sub> ), (T-4)

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## HAZARDOUS SUBSTANCE LIST

*ES	CAS NO.	SUBSTANCE NAME
	10546-01-7	SULFUR FLUORIDE (SF <sub>6</sub> )
	2551-62-4	SULFUR FLUORIDE (SF <sub>6</sub> ), (OC-6-11)
E	7446-11-9	SULFUR TRIOXIDE
E	8014-95-7	SULFURIC ACID
E	7664-93-9	SULFURIC ACID
E	7758-98-7	SULFURIC ACID COPPER(2+) SALT (1:1)
E	7783-20-2	SULFURIC ACID DIAMMONIUM SALT
E	10043-01-3	SULFURIC ACID, ALUMINIUM SALT (3:2)
E	10045-89-3	SULFURIC ACID, AMMONIUM IRON(2+) SALT (2:2:1)
E	15699-18-0	SULFURIC ACID, BERYLLIUM NICKEL(2+) SALT (2:2:1)
ES	13510-49-1	SULFURIC ACID, BERYLLIUM SALT (1:1)
ES	10124-36-4	SULFURIC ACID, CADMIUM(2+) SALT (3:2)
E	10101-53-8	SULFURIC ACID, CHROMIUM(3+) SALT (3:2)
ES	64-67-5	SULFURIC ACID, DIETHYL ESTER
ES	77-78-1	SULFURIC ACID, DIMETHYL ESTER
E	7446-18-6	SULFURIC ACID, DITHALLIUM(I+) SALT
E	7720-78-7	SULFURIC ACID, IRON(2+) SALT (1:1)
E	10028-22-5	SULFURIC ACID, IRON(3+) SALT (3:2)
E	7446-14-2	SULFURIC ACID, LEAD(2+) SALT (1:1)
E	7783-35-9	SULFURIC ACID, MERCURY(2+) SALT (1:1)
E	7786-81-4	SULFURIC ACID, NICKEL(2+) SALT (1:1)
E	10031-59-1	SULFURIC ACID, THALLIUM SALT
E	7733-02-0	SULFURIC ACID, ZINC SALT (1:1)
E	14644-61-2	SULFURIC ACID, ZIRCONIUM(4+) SALT (2:1)
E	10196-04-0	SULFUROUS ACID, DIAMMONIUM SALT
E	10192-30-0	SULFUROUS ACID, MONOAMMONIUM SALT
E	7631-90-5	SULFUROUS ACID, MONOSODIUM SALT
E	2312-35-8	SULFUROUS ACID, 2-[4-(1,1-DIMETHYLETHYL)PHENOXY]CYCLOHEXYL 2-PROPYNYL ESTER
ES	140-57-8	SULFUROUS ACID, 2-CHLOROETHYL 2-[4-(1,1-DIMETHYLETHYL)PHENOXY]-1-METHYLETHYL ESTER
	7791-25-5	SULFURYL CHLORIDE
	2699-79-8	SULFURYL FLUORIDE
E	77-81-6	TABUN
	14807-96-6	TALC (Mg <sub>3</sub> H <sub>2</sub> (SiO <sub>3</sub> ) <sub>4</sub> )
	7440-25-7	TALLOW OIL
	7440-25-7	TANTALUM
ES	8007-45-2	TAR, COAL
E	13494-80-9	TELLURIUM
E	7783-80-4	TELLURIUM FLUORIDE (TEF <sub>6</sub> ), (OC-6-11)
E	13071-79-9	TERBUFOS
E	100-21-0	TEREPHTHALIC ACID
	26140-60-3	TERPHENYLS
	30174-58-4	TERT-BUTYLSTYRENE
	25103-58-6	TERT-DECANETHIOL
	25360-10-5	TERT-DODECANETHIOL
	28983-37-1	TERT-NONANETHIOL
S		TERT-TETRADECANETHIOL
		TESTOSTERONE ESTERS
E	961-11-5	TETRACHLORVINPHOS
E	597-64-8	TETRAETHYL TIN
E	1314-32-5	THALLIC OXIDE
*E	7440-28-0	THALLIUM
E	10102-45-1	THALLIUM(I) NITRATE
E	12039-52-0	THALLIUM(II) SELENIDE
E	6533-73-9	THALLOUS CARBONATE
E	7791-12-0	THALLOUS CHLORIDE
E	2757-18-8	THALLOUS MALONATE
E	2231-57-4	THIOCARBAZIDE
E	1762-95-4	THIOCYANIC ACID, AMMONIUM SALT
E	592-87-0	THIOCYANIC ACID, LEAD(2+) SALT
E	592-85-8	THIOCYANIC ACID, MERCURY(2+) SALT
E	3689-24-5	THIODIPHOSPHORIC ACID ((HO) <sub>2</sub> P(S) <sub>2</sub> O), TETRAETHYL ESTER
E	39196-18-4	THIOFANOX
E	297-97-2	THIONAZIN

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*ES	CAS NO.	SUBSTANCE NAME
	7719-09-7	THIONYL CHLORIDE
	97-77-8	THIOPEROXYDICARBONIC DIAMIDE ((H2N)C(S)2S2), TETRAETHYL-
E	137-26-8	THIOPEROXYDICARBONIC DIAMIDE ((H2N)C(S)2S2), TETRAMETHYL-
	110-02-1	THIOPHENE
	126-33-0	THIOPHENE, TETRAHYDRO-, 1,1-DIOXIDE
E	79-19-6	THIOSEMICARBAZIDE
E	7783-18-8	THIOSULFURIC ACID (H2S2O3), DIAMMONIUM SALT
ES	62-56-6	THIOUREA
E	5344-82-1	THIOUREA, (2-CHLOROPHENYL)-
E	614-78-8	THIOUREA, (2-METHYLPHENYL)-
E	86-98-4	THIOUREA, 1-NAPHTHALENYL-
ES	1314-20-1	THORIUM OXIDE (THO2)
	7440-31-5	TIN
E	7550-45-0	TITANIUM CHLORIDE (TiCl4) (T-4)
	13463-67-7	TITANIUM OXIDE (TiO2)
E	91-08-7	TOLUENE 2,6-DIISOCYANATE
ES	8001-35-2	TOXAPHENE
	110-57-6	TRANS-ACETYLENE DICHLORIDE
		TRANS-1,4-DICHLOROBUTENE
		TRANSFORMER OIL
	77536-68-6	TREMOLITE
E	1031-47-6	TRIAMPHOS
E	24017-47-8	TRIAZOFOS
E	1558-25-4	TRICHLORO(CHLOROMETHYL)SILANE
E	27137-85-5	TRICHLORO(DICHLOROPHENYL)SILANE
E	76-02-8	TRICHLOROACETYL CHLORIDE
E	327-98-0	TRICHLORONATE
E	15468-32-3	TRIDYMITTE (SiO2)
E	998-30-1	TRIETHOXY-SILANE
E	1582-09-8	TRIFLURALIN
E	824-11-3	TRIMETHYLOPROPANE PHOSPHITE
E	1066-45-1	TRIMETHYL-TIN CHLORIDE
E	639-58-7	TRIPHENYL-TIN CHLORIDE
E	7758-29-4	TRIPHOSPHORIC ACID, PENTASODIUM SALT
	1317-95-9	TRIPOLI
E	555-77-1	TRIS(2-CHLOROETHYL)AMINE
	7440-33-7	TUNGSTEN
		TURBO FUELS
	9005-90-7	TURPENTINE
	7440-61-1	URANIUM
E	541-09-3	URANIUM, BIS(ACETATO-O)DIOXO-
E	10102-06-4	URANIUM, BIS(NITRATO-O)DIOXO-, (T-4)
E	36478-76-9	URANIUM, BIS(NITRATO-O,O')DIOXO-, (OC-6-11)-
S	13010-47-4	UREA, N-(2-CHLOROETHYL)-N'-CYCLOHEXYL-N-NITROSO-
ES	759-73-9	UREA, N-ETHYL-N-NITROSO-
ES	684-93-5	UREA, N-METHYL-N-NITROSO-
E	330-54-1	UREA, N'-(3,4-DICHLOROPHENYL)-N,N-DIMETHYL-
E	2001-95-8	VALINOMYCIN
E	7440-62-2	VANADIUM (FUME OR DUST)
	12604-58-9	VANADIUM ALLOY, BASE, V,C,FE (FERROVANADIUM)
	7632-51-1	VANADIUM CHLORIDE (VCL4), (T-4)
	1314-62-1	VANADIUM DUST (V2O5)
	1314-62-1	VANADIUM FUME (V2O5)
E	1314-62-1	VANADIUM OXIDE (V2O5)
E	27774-13-6	VANADIUM, OXOSULFATO(2)-OJ-
		VEGETABLE OIL MISTS
E	129-06-6	WARFARIN SODIUM
		WATER GAS (CARBURETED)
		WELDING FUMES
		WOOD DUST (CERTAIN HARDWOODS AS BEACH AND OAK) SOFTWOOD
		XYLIDINES
E	28347-13-9	XYLYLENE DICHLORIDE
ES	50-55-5	YOHIMBAN-16-CARBOXYLIC ACID, 11,17-DIMETHOXY-18-[(3,4,5-TRIMETHOXYBENZOYL)OXY]-, METHYL ESTER, (3.BETA.,16.BETA.,17.ALPHA.,18.BETA.,20.ALPHA.)

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*ES	CAS NO.	SUBSTANCE NAME
	7440-65-5	YTTRIUM
*E	7440-66-6	ZINC
E	7699-45-8	ZINC BROMIDE (ZNB <sub>2</sub> )
E	7646-85-7	ZINC CHLORIDE (ZNC <sub>2</sub> )
E		ZINC CHLORIDE FUME
E	557-21-1	ZINC CYANIDE (ZNCN <sub>2</sub> )
E	7783-49-5	ZINC FLUORIDE (ZNF <sub>2</sub> )
E	1314-13-2	ZINC OXIDE (ZNO)
E		ZINC OXIDE FUME
E	51810-70-9	ZINC PHOSPHIDE
E	1314-84-7	ZINC PHOSPHIDE (ZNP <sub>2</sub> )
E	58270-08-9	ZINC, DICHLORO(4,4-DIMETHYL-5(((METHYLAMINO)CARBONYLOXY)IMINO)PENTANENITRILE)-(T-4)
E	557-20-0	ZINC, DIETHYL-
E	14639-97-5	ZINCATE(2-), TETRACHLORO-, DIAMMONIUM, (T-4)-
E	14639-98-6	ZINCATE(3-), PENTACHLORO-, TRIAMMONIUM
E	12122-67-7	ZINEB
E	16923-95-8	ZIRCONATE(2-), HEXAFLUORO-, DIPOTASSIUM, (OC-6-11)-
E	7440-67-7	ZIRCONIUM
E	10026-11-6	ZIRCONIUM CHLORIDE (ZRCL <sub>4</sub> ), (T-4)- ZIRCONIUM POWDER
E	109-73-9	1-BUTANAMINE
	111-92-2	1-BUTANAMINE, N-BUTYL-
ES	924-16-3	1-BUTANAMINE, N-BUTYL-N-NITROSO-
	13360-63-9	1-BUTANAMINE, N-ETHYL-
	110-68-9	1-BUTANAMINE, N-METHYL-
	102-82-9	1-BUTANAMINE, N,N-DIBUTYL-
E	109-79-5	1-BUTANETHIOL
	71-36-3	1-BUTANOL
	96-20-8	1-BUTANOL, 2-AMINO-
	97-95-0	1-BUTANOL, 2-ETHYL-
	137-32-6	1-BUTANOL, 2-METHYL-
	123-51-3	1-BUTANOL, 3-METHYL-
E	123-92-2	1-BUTANOL, 3-METHYL-, ACETATE
	689-97-4	1-BUTEN-3-YNE
	78-80-8	1-BUTEN-3-YNE, 2-METHYL-
	106-98-9	1-BUTENE
	563-46-2	1-BUTENE, 2-METHYL-
	563-78-0	1-BUTENE, 2,3-DIMETHYL-
	594-56-9	1-BUTENE, 2,3,3-TRIMETHYL-
	563-45-1	1-BUTENE, 3-METHYL-
	64037-54-3	1-BUTENE, 3,4-DICHLORO-, (+, -)-
	2016-57-1	1-DECANAMINE
	112-30-1	1-DECANOL
		1-DIBUTYLAMINO-2-PROPANOL
	112-55-0	1-DODECANETHIOL
	111-68-2	1-HEPTANAMINE
	592-76-7	1-HEPTENE
	111-26-2	1-HEXANAMINE
	143-16-8	1-HEXANAMINE, N-HEXYL-
	104-75-6	1-HEXANAMINE, 2-ETHYL-
	106-20-7	1-HEXANAMINE, 2-ETHYL-N-(2-ETHYLHEXYL)-
	111-27-3	1-HEXANOL
	104-76-7	1-HEXANOL, 2-ETHYL-
	3452-97-9	1-HEXANOL, 3,5,5-TRIMETHYL-
	592-41-6	1-HEXENE
E	134-32-7	1-NAPHTHALENAMINE
E	63-25-2	1-NAPHTHALENOL, METHYLCARBAMATE
	111-86-4	1-OCTANAMINE
	1120-48-5	1-OCTANAMINE, N-OCTYL-
	111-88-6	1-OCTANETHIOL
	111-87-5	1-OCTANOL
	111-66-0	1-OCTENE
	110-58-7	1-PENTANAMINE
	2050-92-2	1-PENTANAMINE, N-PENTYL-

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Pt. XIII

*ES	CAS NO.	SUBSTANCE NAME
	621-77-2	1-PENTANAMINE, N,N-DIPENTYL-
	110-66-7	1-PENTANETHIOL
	71-41-0	1-PENTANOL
	54972-97-3	1-PENTANOL, METHYL-
	109-67-1	1-PENTENE
	763-29-1	1-PENTENE, 2-METHYL-
	565-76-4	1-PENTENE, 2,3,4-TRIMETHYL-
	107-39-1	1-PENTENE, 2,4,4-TRIMETHYL-
	691-37-2	1-PENTENE, 4-METHYL-
	627-19-0	1-PENTYNE
	140-31-8	1-PIPERAZINEETHANAMINE
E	107-10-8	1-PROPANAMINE
ES	621-64-7	1-PROPANAMINE, N-NITROSO-N-PROPYL-
E	142-84-7	1-PROPANAMINE, N-PROPYL-
	102-69-2	1-PROPANAMINE, N,N-DIPROPYL-
E	78-81-9	1-PROPANAMINE, 2-METHYL-
	110-96-3	1-PROPANAMINE, 2-METHYL-N-(2-METHYLPROPYL)-
	5332-73-0	1-PROPANAMINE, 3-METHOXY-
	71-23-8	1-PROPANOL
	124-68-5	1-PROPANOL, 2-AMINO-2-METHYL-
	78-89-7	1-PROPANOL, 2-CHLORO-
E	78-83-1	1-PROPANOL, 2-METHYL-
	75-84-3	1-PROPANOL, 2,2-DIMETHYL-
ES	126-72-7	1-PROPANOL, 2,3-DIBROMO-, PHOSPHATE (3:1)
	156-87-6	1-PROPANOL, 3-AMINO-
	108-22-5	1-PROPEN-2-OL, ACETATE
E	115-07-1	1-PROPENE
E	26952-23-8	1-PROPENE, DICHLORO-
	13987-01-4	1-PROPENE, TRIMER
	590-21-6	1-PROPENE, 1-CHLORO-
	928-55-2	1-PROPENE, 1-ETHOXY-
ES	542-75-6	1-PROPENE, 1,3-DICHLORO-
E	8003-19-8	1-PROPENE, 1,3-DICHLORO-, MIXT. WITH 1,2-DICHLOROPROPANE
	557-98-2	1-PROPENE, 2-CHLORO-
	115-11-7	1-PROPENE, 2-METHYL-
E	78-88-6	1-PROPENE, 2,3-DICHLORO-
	3917-15-5	1-PROPENE, 3-(ETHENYLOXY)-
	106-95-6	1-PROPENE, 3-BROMO-
E	107-05-1	1-PROPENE, 3-CHLORO-
S	563-47-3	1-PROPENE, 3-CHLORO-2-METHYL-
	57-06-7	1-PROPENE, 3-ISOTHIOCYANATO-
	557-40-4	1-PROPENE, 3,3'-OXYBIS-
	74-99-7	1-PROPYNE
E	106-96-7	1-PROPYNE, 3-BROMO-
E	92-52-4	1,1'-BIPHENYL
ES	1336-36-3	1,1'-BIPHENYL, CHLORO DERIVS.
	28984-85-2	1,1'-BIPHENYL, NITRO-
	643-58-3	1,1'-BIPHENYL, 2-METHYL-
	92-66-0	1,1'-BIPHENYL, 4-BROMO-
E	92-93-3	1,1'-BIPHENYL, 4-NITRO-
S	95-83-0	1,2-BENZENEDIAMINE, 4-CHLORO-
ES	117-81-7	1,2-BENZENEDICARBOXYLIC ACID, BIS(2-ETHYLHEXYL) ESTER
E	85-68-7	1,2-BENZENEDICARBOXYLIC ACID, BUTYL PHENYLMETHYL ESTER
	131-17-9	1,2-BENZENEDICARBOXYLIC ACID, DI-2-PROPENYL ESTER
E	84-74-2	1,2-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER
E	84-66-2	1,2-BENZENEDICARBOXYLIC ACID, DIETHYL ESTER
E	131-11-3	1,2-BENZENEDICARBOXYLIC ACID, DIMETHYL ESTER
E	117-84-0	1,2-BENZENEDICARBOXYLIC ACID, DIOCTYL ESTER
	84-72-0	1,2-BENZENEDICARBOXYLIC ACID, 2-ETHOXY-2-OXOETHYL ETHYL ESTER
	85-71-2	1,2-BENZENEDICARBOXYLIC ACID, 2-ETHOXY-2-OXOETHYL METHYL ESTER
E	120-80-9	1,2-BENZENEDIOL
	98-29-3	1,2-BENZENEDIOL, 4-(1,1-DIMETHYLETHYL)-
E	51-43-4	1,2-BENZENEDIOL, 4-(1-HYDROXY-2-(METHYLAMINO)ETHYL)-

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*ES	CAS NO.	SUBSTANCE NAME
ES	81-07-2	1,2-BENZISOTHIAZOL-3(2H)-ONE, 1,1-DIOXIDE
S	128-44-9	1,2-BENZISOTHIAZOL-3(2H)-ONE, 1,1-DIOXIDE, SODIUM SALT
E	123-33-1	1,2-DIHYDRO-3,6-PYRIDAZINEDIONE
E	107-15-3	1,2-ETHANEDIAMINE
	111-40-0	1,2-ETHANEDIAMINE, N-(2-AMINOETHYL)-
	112-57-2	1,2-ETHANEDIAMINE, N-(2-AMINOETHYL)-N'-(2-[(2-AMINOETHYL)AMINO]ETHYL)-
	100-36-7	1,2-ETHANEDIAMINE, N,N-DIETHYL-
E	91-80-5	1,2-ETHANEDIAMINE, N,N-DIMETHYL-N'-2-PYRIDINYL-N''-(2-THIENYLMETHYL)-
	112-24-3	1,2-ETHANEDIAMINE, N,N'-BIS(2-AMINOETHYL)-
E	107-21-1	1,2-ETHANEDIOL
	111-55-7	1,2-ETHANEDIOL, DIACETATE
	628-96-6	1,2-ETHANEDIOL, DINITRATE
E	111-54-6	1,2-ETHANEDIYL BISCARBAMODITHIOIC ACID
	50146	1,2-ETHYLDENE DICHLORIDE
ES	1120-71-4	1,2-OXATHIOLANE, 2,2-DIOXIDE
	78-90-0	1,2-PROPANEDIAMINE
	57-55-6	1,2-PROPANEDIOL
	6423-43-4	1,2-PROPANEDIOL, DINITRATE
E		1,2/1,3 DICHLOROPROPYLENE
E	1185-57-5	1,2,3-PROPANETRICARBOXYLIC ACID, 2-HYDROXY-, AMMONIUM IRON(3+) SALT
E	3012-65-5	1,2,3-PROPANETRICARBOXYLIC ACID, 2-HYDROXY-, DIAMMONIUM SALT
	56-81-5	1,2,3-PROPANETRIOL
E	55-63-0	1,2,3-PROPANETRIOL, TRINITRATE
S	299-75-2	1,2,3,4-BUTANETETROL, 1,4-DIMETHANESULFONATE, [(R*,R*)]-
E	7421-93-4	1,2,4-METHENOCYCLOPENTA[CD]PENTALENE-5-CARBOXALDEHYDE, 2,2A,3,3,4,7-HEXACHLORODECAHYDRO-, (1.ALPHA.,2.BETA.,2A.BETA.,4.BETA.,4A.BETA.,5.BETA.,6A.BETA.,6B.BETA.,7R*)-
	21087-64-9	1,2,4-TRIAZIN-5(4H)-ONE, 4-AMINO-6-(1,1-DIMETHYLETHYL)-3-(METHYLTHIO)-
ES	39156-41-7	1,3-BENZENEDIAMINE, 4-METHOXY-, SULFATE (1:1)
ES	95-80-7	1,3-BENZENEDIAMINE, 4-METHYL-
	626-17-5	1,3-BENZENEDICARBONITRILE
	1477-55-0	1,3-BENZENEDIMETHANAMINE
E	108-46-3	1,3-BENZENEDIOL
ES	120-58-1	1,3-BENZODIOXOLE, 5-(1-PROPENYL)-
ES	94-59-7	1,3-BENZODIOXOLE, 5-(2-PROPENYL)-
ES	94-58-6	1,3-BENZODIOXOLE, 5-PROPYL-
ES	106-99-0	1,3-BUTADIENE
E	87-48-3	1,3-BUTADIENE, 1,1,2,2,4,4-HEXACHLORO-
E	126-99-8	1,3-BUTADIENE, 2-CHLORO-
E	78-79-5	1,3-BUTADIENE, 2-METHYL-
	1653-19-6	1,3-BUTADIENE, 2,3-DICHLORO-
E	86-78-3	1,3-BUTADIENE, 1,1,2,3,4,4-HEXACHLORO-
	590-88-5	1,3-BUTANEDIAMINE
	32280-46-9	1,3-BUTANEDIAMINE, N,N'-DIETHYL-
	542-92-7	1,3-CYCLOPENTADIENE
E	77-47-4	1,3-CYCLOPENTADIENE, 1,2,3,4,5,5-HEXACHLORO-
		1,3-DICHLORO-2-PROPANOL
	96-49-1	1,3-DIOXOLAN-2-ONE
	646-06-0	1,3-DIOXOLANE
	126-39-6	1,3-DIOXOLANE, 2-ETHYL-2-METHYL-
E	85-44-9	1,3-ISOBENZOFURANDIONE
E	504-60-9	1,3-PENTADIENE
	1118-58-7	1,3-PENTADIENE, 2-METHYL-
	926-56-7	1,3-PENTADIENE, 4-METHYL-
	149-31-5	1,3-PENTANEDIOL, 2-METHYL-
	109-76-2	1,3-PROPANEDIAMINE
	3312-60-5	1,3-PROPANEDIAMINE, N-CYCLOHEXYL-
	104-78-9	1,3-PROPANEDIAMINE, N,N-DIETHYL-
	109-55-7	1,3-PROPANEDIAMINE, N,N-DIMETHYL-
	115-84-4	1,3-PROPANEDIOL, 2-BUTYL-2-ETHYL-
	115-77-5	1,3-PROPANEDIOL, 2,2-BIS(HYDROXYMETHYL)-
	115-76-4	1,3-PROPANEDIOL, 2,2-DIETHYL-
S	2385-85-5	1,3,4-METHENO-1H-CYCLOBUTA[CD]PENTALENE, 1,1A,2,2,3,3A,4,5,5A,5B,6-DODECACHLOROCTAHYDRO-

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*ES	CAS NO.	SUBSTANCE NAME
ES	143-50-0	1,3,4-METHENO-2H-CYCLOBUTA(CD)PENTALEN-2-ONE. 1,1A,3,3A,4,5,5A,5B,6-DECACHLOROCTAHYDRO-
S	712-68-5	1,3,4-THIAZOL-2-AMINE, 5-(5-NITRO-2-FURANYL)-
	1912-24-9	1,3,5-TRIAZINE-2,4-DIAMINE, 6-CHLORO-N-ETHYL-N'-(1-METHYLETHYL)-
	13057-78-8	1,3,5-TRIAZINE-2,4,6-(1H,3H,5H)-TRIONE, 1-CHLORO-
	2782-57-2	1,3,5-TRIAZINE-2,4,6-(1H,3H,5H)-TRIONE, 1,3-DICHLORO-
	2244-21-5	1,3,5-TRIAZINE-2,4,6-(1H,3H,5H)-TRIONE, 1,3-DICHLORO-, POTASSIUM SALT
	2893-78-9	1,3,5-TRIAZINE-2,4,6-(1H,3H,5H)-TRIONE, 1,3-DICHLORO-, SODIUM SALT
	51580-86-0	1,3,5-TRIAZINE-2,4,6-(1H,3H,5H)-TRIONE, 1,3-DICHLORO-, SODIUM SALT, DIHYDRATE
	87-90-1	1,3,5-TRIAZINE-2,4,6-(1H,3H,5H)-TRIONE, 1,3,5-TRICHLORO-
	121-82-4	1,3,5-TRIAZINE, HEXAHYDRO-1,3,5-TRINITRO-
	110-88-3	1,3,5-TRIOXANE
E	123-43-7	1,3,5-TRIOXANE, 2,4,6-TRIMETHYL-
	108-62-3	1,3,5,7-TETROXOCANE, 2,4,6,8-TETRAMETHYL-
E	106-50-3	1,4-BENZENEDIAMINE
	101-96-2	1,4-BENZENEDIAMINE, N,N'-BIS(1-METHYLPROPYL)-
	3081-14-9	1,4-BENZENEDIAMINE, N,N'-BIS(1,4-DIMETHYLPENTYL)-
	100-20-9	1,4-BENZENEDICARBONYL DICHLORIDE
S	55-98-1	1,4-BUTANEDIOL, DIMETHANESULFONATE
ES	123-91-1	1,4-DIOXANE
	25136-55-4	1,4-DIOXANE, DIMETHYL-
	592-45-0	1,4-HEXADIENE
E	130-15-4	1,4-NAPHTHALENEDIONE
E	117-80-6	1,4-NAPHTHALENEDIONE, 2,3-DICHLORO-
	15980-15-1	1,4-OXATHIANE
E	309-00-2	1,4:5,8-DIMETHANONAPHTHALENE, 1,2,3,4,10-HEXACHLORO-1,4,4A,5,8,8A-HEXAHYDRO-, (1.ALPHA.,4.ALPHA.,4A.BETA.,5.ALPHA.,8.ALPHA.,8A.BETA.)
	111-78-4	1,5-CYCLOOCTADIENE
	821-08-9	1,5-HEXADIEN-3-YNE
S	443-48-1	1H-IMIDAZOLE-1-ETHANOL, 2-METHYL-5-NITRO-
S	4342-03-4	1H-IMIDAZOLE-4-CARBOXAMIDE, 5-(3,3-DIMETHYL-1-TRIAZENYL)-
	95-13-6	1H-INDENE
	83-26-1	1H-INDENE-1,3(2H)-DIONE, 2-(2-DIMETHYL-1-OXOPROPYL)-
E	133-06-2	1H-ISOINDOLE-1,3(2H)-DIONE, 3A,4,7,7A-TETRAHYDRO-2-(TRICHLOROMETHYL)THIO-
	2425-06-1	1H-ISOINDOLE-1,3(2H)-DIONE, 3A,4,7,7A-TETRAHYDRO-2-[(1,1,2,2-TETRACHLOROETHYL)THIO]-
S	446-86-6	1H-PURINE, 6-[(1-METHYL-4-NITRO-1H-IMIDAZOL-5-YL)THIO]-
	109-97-7	1H-PYRROLE
	27417-39-6	1H-PYRROLE, METHYL-
ES	61-82-5	1H-1,2,4-TRIAZOL-3-AMINE
	92-84-2	10H-PHENOTHIAZINE
S	68-22-4	19-NORPREGN-4-EN-20-YN-3-ONE, 17-HYDROXY-, (17.ALPHA.)
S	72-33-3	19-NORPREGNA-1,3,5(10)-TRIEN-20-YN-17-OL, 3-METHOXY-, (17.ALPHA.)
S	57-63-6	19-NORPREGNA-1,3,5(10)-TRIEN-20-YN-3,17-DIOL, (17.ALPHA.)
E	13952-84-6	2-BUTANAMINE
	626-23-3	2-BUTANAMINE, N-(1-METHYLPROPYL)-
	513-53-1	2-BUTANETHIOL
	2084-18-6	2-BUTANETHIOL, 3-METHYL-
E	78-92-2	2-BUTANOL
	75-85-4	2-BUTANOL, 2-METHYL-
E	625-16-1	2-BUTANOL, 2-METHYL-, ACETATE
	598-75-4	2-BUTANOL, 3-METHYL-
E	78-93-3	2-BUTANONE
E	1338-23-4	2-BUTANONE, PEROXIDE
	563-80-4	2-BUTANONE, 3-METHYL-
	6117-91-5	2-BUTEN-1-OL
E	4170-30-3	2-BUTENAL
	107-01-7	2-BUTENE
	624-64-6	2-BUTENE, (E)-
	590-18-1	2-BUTENE, (Z)-
	4784-77-4	2-BUTENE, 1-BROMO-
	591-97-9	2-BUTENE, 1-CHLORO-
	926-57-8	2-BUTENE, 1,3-DICHLORO-
E	764-41-0	2-BUTENE, 1,4-DICHLORO-

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S--SPECIAL HAZARDOUS SUBSTANCE

Ch. 323 HAZARDOUS SUBSTANCE LIST

*ES	CAS NO.	SUBSTANCE NAME
	4461-41-0	2-BUTENE, 2-CHLORO-
	513-35-9	2-BUTENE, 2-METHYL-
E	563-79-1	2-BUTENE, 2,3-DIMETHYL-
	110-17-8	2-BUTENEDIOLIC ACID (E)-
E	110-16-7	2-BUTENEDIOLIC ACID (Z)-
	3724-65-0	2-BUTENOIC ACID
	14861-06-4	2-BUTENOIC ACID, ETHENYL ESTER
	10544-63-5	2-BUTENOIC ACID, ETHYL ESTER
ES	303-34-4	2-BUTENOIC ACID, 2-METHYL-, 7-[[2,3-DIHYDROXY-2-(1-METHOXYETHYL)-3-METHYL-1-OXOBUTOXY]METHYL]-, 2,3,5,7A-TETRAHYDRO-1H-PYRROLIZIN-1-YL ESTER, [[IS-[1ALPHA.(Z),7(2S*,3R*),7A.ALPHA.]]]
E	7786-34-7	2-BUTENOIC ACID, 3-[[DIMETHOXYPHOSPHINYL]OXY], METHYL ESTER
	503-17-3	2-BUTYNE
E	78-59-1	2-CYCLOHEXEN-1-ONE, 3,5,5-TRIMETHYL-
	3688-53-7	2-ETHOXY-3,4-DI-HYDRO-2-PYRAN
S	98-01-1	2-FURANACETAMIDE, ALPHA-[[[5-NITRO-2-FURANYL]METHYLENE]-
E	617-89-0	2-FURANCARBOXALDEHYDE
	98-00-0	2-FURANMETHANAMINE
	97-59-4	2-FURANMETHANOL
	110-43-0	2-FURANMETHANOL, TETRAHYDRO-
	14686-13-6	2-HEPTANONE
	591-78-6	2-HEPTENE, (E)-
	110-12-3	2-HEXANONE
	645-62-5	2-HEXANONE, 5-METHYL-
	5309-52-4	2-HEXENAL, 2-ETHYL-
	764-35-2	2-HEXENE (MIXED CIS-AND TRANS-ISOMERS)
ES	96-43-7	2-HEXENOIC ACID, 2-ETHYL-
S	61-57-4	2-HEXYNE
S	555-84-0	2-IMIDAZOLIDINETHIONE
ES	91-59-8	2-IMIDAZOLIDINONE, 1-(5-NITRO-2-THIAZOLYL)-
	135-88-6	2-IMIDAZOLIDINONE, 1-[[[5-NITRO-2-FURANYL]METHYLENE]AMINO]-
ES	494-03-1	2-NAPHTHALENAMINE, N-PHENYL-
S	2646-17-5	2-NAPHTHALENAMINE, N,N-BIS(2-CHLOROETHYL)-
ES	6358-53-8	2-NAPHTHALENOL, 1-[[2-METHYLPHENYL]AZO]-
	139-91-3	2-NAPHTHALENOL, 1-[[2,5-DIMETHOXYPHENYL]AZO]-
ES	57-57-8	2-OCTENE (MIXED CIS-AND TRANS-ISOMERS)
S	3068-88-0	2-OXAZOLIDINONE
	674-82-8	2-(4-MORPHOLINYL)METHYL-3-[[[5-NITRO-2-FURANYL]METHYLENE]AMINO]-
	625-30-9	2-OXETANONE, 4-METHYL-
	107-45-9	2-OXETANONE, 4-METHYLENE-
	108-09-8	2-PENTANAMINE
	141-59-3	2-PENTANAMINE, 2,4,4-TRIMETHYL-
	6032-28-7	2-PENTANAMINE, 4-METHYL-
E	626-38-0	2-PENTANETHIOL, 2,4,4-TRIMETHYL-
	108-11-2	2-PENTANOL
	107-87-9	2-PENTANOL, ACETATE
	123-42-2	2-PENTANOL, 4-METHYL-
E	108-10-1	2-PENTANONE
	646-04-8	2-PENTANONE, 4-HYDROXY-4-METHYL-
	627-20-3	2-PENTENE, (E)-
	625-27-4	2-PENTENE, (Z)-
	107-40-4	2-PENTENE, 2-METHYL-
	598-96-9	2-PENTENE, 2,4,4-TRIMETHYL-
	4461-48-7	2-PENTENE, 3,4,4-TRIMETHYL-
E	90-43-7	2-PENTENE, 4-METHYL-
	75-31-0	2-PHENYLPHENOL
	108-18-9	2-PROPANAMINE
E	75-64-9	2-PROPANAMINE, N-(1-METHYLETHYL)-
	75-66-1	2-PROPANAMINE, 2-METHYL-
E	67-63-0	2-PROPANETHIOL, 2-METHYL-
		2-PROPANOL

\*—ANY COMPOUND OF THIS SUBSTANCE IS ALSO AN ENVIRONMENTAL HAZARD  
 E—ENVIRONMENTAL HAZARD  
 S—SPECIAL HAZARDOUS SUBSTANCE

## RIGHT-TO-KNOW

Pt. XIII

*ES	CAS NO.	SUBSTANCE NAME
	2109-64-0	2-PROPANOL, 1-(DIBUTYLAMINO)-
	108-16-7	2-PROPANOL, 1-(DIMETHYLAMINO)-
	124-16-3	2-PROPANOL, 1-(2-BUTOXYETHOXY)-
	78-96-6	2-PROPANOL, 1-AMINO-
	127-00-4	2-PROPANOL, 1-CHLORO-
	107-98-2	2-PROPANOL, 1-METHOXY-
	110-97-4	2-PROPANOL, 1,1'-IMINOBIS-
	122-20-3	2-PROPANOL, 1,1',1'',NITRILOTRIS-
	616-29-5	2-PROPANOL, 1,3-DIAMINO-
E	75-65-0	2-PROPANOL, 2-METHYL-
F	67-64-1	2-PROPANONE
	684-16-2	2-PROPANONE, 1,1,1,3,3,3-HEXAFLUORO-
E	107-11-9	2-PROPEN-1-AMINE
E	107-18-6	2-PROPEN-1-OL
	513-42-8	2-PROPEN-1-OL, 2-METHYL-
E	107-02-8	2-PROPENAL
	78-85-3	2-PROPENAL, 2-METHYL-
F	79-06-1	2-PROPENAMIDE
	869-29-4	2-PROPENE-1,1-DIOL, DIACETATE
ES	107-13-1	2-PROPENENITRILE
E	126-98-7	2-PROPENENITRILE, 2-METHYL-
E	79-10-7	2-PROPENOIC ACID
E	141-32-2	2-PROPENOIC ACID, BUTYL ESTER
	2156-96-9	2-PROPENOIC ACID, DECYL ESTER
ES	140-88-5	2-PROPENOIC ACID, ETHYL ESTER
E	96-33-3	2-PROPENOIC ACID, METHYL ESTER
	2499-59-4	2-PROPENOIC ACID, OCTYL ESTER
	2426-54-2	2-PROPENOIC ACID, 2-(DIETHYLAMINO)ETHYL ESTER
	137-05-3	2-PROPENOIC ACID, 2-CYANO-, METHYL ESTER
	106-71-8	2-PROPENOIC ACID, 2-CYANOETHYL ESTER
	3953-10-4	2-PROPENOIC ACID, 2-ETHYLBUTYL ESTER
	103-11-7	2-PROPENOIC ACID, 2-ETHYLHEXYL ESTER
	818-61-1	2-PROPENOIC ACID, 2-HYDROXYETHYL ESTER
	999-61-1	2-PROPENOIC ACID, 2-HYDROXYPROPYL ESTER
	79-41-4	2-PROPENOIC ACID, 2-METHYL-
	97-88-1	2-PROPENOIC ACID, 2-METHYL-, BUTYL ESTER
E	97-63-2	2-PROPENOIC ACID, 2-METHYL-, ETHYL ESTER
E	80-62-6	2-PROPENOIC ACID, 2-METHYL-, METHYL ESTER
	2867-47-2	2-PROPENOIC ACID, 2-METHYL-, 2-(DIMETHYLAMINO)ETHYL ESTER
	3775-90-4	2-PROPENOIC ACID, 2-METHYL-, 2-[(1,1-DIMETHYLETHYL)AMINO]ETHYL ESTER
	106-63-8	2-PROPENOIC ACID, 2-METHYLPROPYL ESTER
E	107-19-7	2-PROPYN-1-OL
	504-29-0	2-PYRIDINAMINE
	1918-02-1	2-PYRIDINECARBOXYLIC ACID, 4-AMINO-3,5,6-TRICHLORO-
	616-45-5	2-PYRROLIDINONE
	872-50-4	2-PYRROLIDINONE, 1-METHYL-
		2-BETA-BUTOXYETHOXYETHYL CHLORIDE
ES	1464-53-5	2,2'-BIOXIRANE
	431-03-8	2,3-BUTANEDIONE
ES	66-75-1	2,4(1H,3H)-PYRIMIDINEDIONE, 5-[BIS(2-CHLOROETHYL)AMINO]-
	314-40-9	2,4(1H,3H)-PYRIMIDINEDIONE, 5-BROMO-6-METHYL-3-(1-METHYLPROPYL)-
E	615-05-4	2,4-DIAMINOANISOLE
	80466-34-8	2,4-HEXADIENAL
	118-52-5	2,4-IMIDAZOLIDINEDIONE, 1,3-DICHLORO-5,5-DIMETHYL-
S	57-41-0	2,4-IMIDAZOLIDINEDIONE, 5,5-DIPHENYL-
	107-41-5	2,4-PENTANEDIOL, 2-METHYL-
	123-54-6	2,4-PENTANEDIONE
E		2,4,5-T AMINES
E	2008-46-0	2,4,5-T AMINES
E	61792-07-2	2,4,5-T ESTERS
E	25168-15-4	2,4,5-T ESTERS
E	1928-47-8	2,4,5-T ESTERS
E	106-51-4	2,5-CYCLOHEXADIENE-1,4-DIONE
ES	68-76-8	2,5-CYCLOHEXADIENE-1,4-DIONE, 2,3,5-TRIS(1-AZIRIDINYL)-
E	108-31-6	2,5-FURANDIONE

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*ES	CAS NO.	SUBSTANCE NAME
	504-20-1	2,5-HEPTADIEN-4-ONE, 2,6-DIMETHYL-
	2935-44-6	2,5-HEXANEDIOL
E	1024-57-3	2,5-METHANO-2H-INDENO[1,2-B]OXIRENE, 2,3,4,5,6,7,7-HEPTACHLORO-1A,1B,5,5A,6,6A-HEXAHYDRO-, (1A.ALPHA.,1B.BETA.,2.ALPHA.,5.ALPHA.,5A.BETA.,6.BETA.,A.ALPHA.)
E	87-65-0	2,6-DICHLOROPHENOL
E	66-81-9	2,6-PIPERIDINEDIONE, 4-[2-(3,5-DIMETHYL-2-OXOCYCLOHEXYL)-2-HYDROXYETHYL], [1S-[1.ALPHA.(5*),3.ALPHA.,5.BETA.]]-
S	94-78-0	2,6-PYRIDINEDIAMINE, 3-(PHENYLAZO)-
S	136-40-3	2,6-PYRIDINEDIAMINE, 3-(PHENYLAZO)-, MONOHYDROCHLORIDE
S	3564-09-8	2,7-NAPHTHALENEDISULFONIC ACID, 3-HYDROXY-4-[(2,4,5-TRIMETHYLPHENYL)AZO]-, DISODIUM SALT
ES	72-57-1	2,7-NAPHTHALENEDISULFONIC ACID, 3,3'-[(3,3'-DIMETHYL[1,1'-BIPHENYL]-4,4'-DIYL)BIS(AZO)]BIS[5-AMINO-4-HYDROXY-, TETRASODIUM SALT
ES	2602-46-2	2,7-NAPHTHALENEDISULFONIC ACID, 3,3'-[1,1'-BIPHENYL]-4,4'-DIYLBIS(AZO)]BIS[5-AMINO-4-HYDROXY-, TETRASODIUM SALT
ES	3761-53-3	2,7-NAPHTHALENEDISULFONIC ACID, 4-[(2,4-DIMETHYLPHENYL)AZO]-3-HYDROXY-, DISODIUM SALT
ES	1937-37-7	2,7-NAPHTHALENEDISULFONIC ACID, 4-AMINO-3-[[4'-(2,4-DIAMINOPHENYL)AZO][1,1'-BIPHENYL]-4-YL]AZO]-5-HYDROXY-6-(PHENYLAZO)-, DISODIUM SALT
E	60-57-1	2,7,3,6-DIMETHANONAPHTH[2,3-B]OXIRENE, 3,4,5,6,9,9-HEXACHLORO-1A,2,2A,3,6,6A,7,7A-OCTAHYDRO-, (1A.ALPHA.,2.BETA.,2A.ALPHA.,3.BETA.,6A.BETA.,6A.ALPH.,7.BETA.,7A.ALPHA.)
E	72-20-8	2,7,3,6-DIMETHANONAPHTH[2,3-B]OXIRENE, 3,4,5,6,9,9-HEXACHLORO-1A,2,2A,3,6,6A,7,7A-OCTAHYDRO-, (1A.ALPHA.,2.BETA.,2A.BETA.,3.ALPHA.,6.ALPHA.,6A.BET.,7.BETA.,7A.ALPHA.)
	105-60-2	2H-AZEPIN-2-ONE, HEXAHYDRO-
	100-73-2	2H-PYRAN-2-CARBOXALDEHYDE, 3,4-DIHYDRO-
	25512-65-6	2H-PYRAN, DIHYDRO-
	142-68-7	2H-PYRAN, TETRAHYDRO-
	110-87-2	2H-PYRAN, 3,4-DIHYDRO-
	3174-74-1	2H-PYRAN, 3,6-DIHYDRO-
E	81-81-2	2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-
	154-23-4	2H-1-BENZOPYRAN-3,5,7-TRIOL, 2-(3,4-DIHYDROXYPHENYL)-3,4-DIHYDRO-, (2R-TRANS)-
ES	50-18-0	2H-1,3,2-OXAZAPHOSPHORIN-2-AMINE, N,N-BIS(2-CHLOROETHYL)TETRAHYDRO-, 2-OXIDE
S	315-22-0	20-NORCROTALANAN-11,15-DIONE, 14,19-DIHYDRO-12,13-DIHYDROXY-, (13.ALPHA.,14.ALPHA.)
S		3-AMINO-1-METHYL-5-H-PYRIDO[4,3-B]INDOLEACETATE
S		3-AMINO-1,4-DIMETHYL-5-H-PYRIDO[4,3-B]INDOLE ACETATE
E	78-94-4	3-BUTEN-2-ONE
	814-78-8	3-BUTEN-2-ONE, 3-METHYL-
	115-19-5	3-BUTYN-2-OL, 2-METHYL-
	100-50-5	3-CYCLOHEXENE-1-CARBOXALDEHYDE
	106-35-4	3-HEPTANONE
	541-85-5	3-HEPTANONE, 5-METHYL-
	589-38-8	3-HEPTENE (MIXED CIS AND TRANS)
	928-96-1	3-HEXANONE
S		3-HEXEN-1-OL, (Z)-
	106-68-3	3-METHYLNITROSAMINOPROPIONITRILE
	584-02-1	3-OCTANONE
	96-22-0	3-PENTANOL
	141-79-7	3-PENTANONE
ES	56-04-2	3-PENTEN-2-ONE, 4-METHYL-
ES	51-52-5	4(1H)-PYRIMIDINONE, 2,3-DIHYDRO-6-METHYL-2-THIOXO-
E	60-09-3	4(1H)-PYRIMIDINONE, 2,3-DIHYDRO-6-PROPYL-2-THIOXO-
	123-19-3	4-AMINOAZOBENZENE
	108-83-8	4-HEPTANONE
	2038-03-1	4-HEPTANONE, 2,6-DIMETHYL-
	622-40-2	4-MORPHOLINEETHANAMINE
	123-00-2	4-MORPHOLINEETHANOL
		4-MORPHOLINEPROPANAMINE

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S—SPECIAL HAZARDOUS SUBSTANCE

*ES	CAS NO.	SUBSTANCE NAME
	123-17-1	4-NONANOL, 2,6,8-TRIMETHYL-
	123-18-2	4-NONANONE, 2,6,8-TRIMETHYL-
	2971-90-6	4-PYRIDINOL, 3,5-DICHLORO-2,6-DIMETHYL-
	19594-40-2	4-UNDECANONE, 2-METHYL-
S	13552-44-8	4,4-METHYLENEDIANILINE AND ITS DIHYDROCHLORIDE
	4685-14-7	4,4'-BIPYRIDINIUM, 1,1'-DIMETHYL-
E	2074-50-2	4,4'-BIPYRIDINIUM, 1,1'-DIMETHYL-, BIS(METHYL SULFATE)
E	1910-42-5	4,4'-BIPYRIDINIUM, 1,1'-DIMETHYL-, DICHLORIDE
E	80-05-7	4,4'-ISOPROPYLIDENEDIPHENOL
E	131-89-5	4,6-DINITRO-O-CYCLOHEXYLPHENOL
E	57-74-9	4,7-METHANO-1H-INDENE, 1,2,4,5,6,7,8,8-OCTACHLORO-2,3,3A,4,7,7A-HEXAHYDRO-
E	76-44-8	4,7-METHANO-1H-INDENE, 1,4,5,6,7,8,8-HEPTACHLORO-3A,4,7,7A-TETRAHYDRO-
	77-73-6	4,7-METHANO-1H-INDENE, 3A,4,7,7A-TETRAHYDRO-
S	91681-63-9	4H-1-BENZOPYRAN-4-ONE, 6-(2,3-DIHYDROXY-3-METHYL BUTYL)-3-(2,4-DIHYDROXYPHENYL)-7-HYDROXY-
	638-17-5	4H-1,3,5-DITHIAZINE, DIHYDRO-2,4,6-TRIMETHYL-, (2-ALPHA,4-ALPHA,6-ALPHA)-
	552-30-7	5-ISOBENZOFURAN CARBOXYLIC ACID, 1,3-DIHYDRO-1,3-DIOXO-
S	23214-92-8	5,12-NAPHTHACENEDIONE, 10-[(3-AMINO-2,3,6-TRIDEOXY-.ALPHA.-L-LYXO-HEXOPYRANOSYL)OXY]- 7,8,9,10-TETRAHYDRO-6,8,11-TRIHYDROXY-8-(HYDROXYACETYL)-1-METOXY-, (8S-CIS)-
S	25316-40-9	5,12-NAPHTHACENEDIONE, 10-[(3-AMINO-2,3,6-TRIDEOXY-.ALPHA.-L-LYXO-HEXOPYRANOSYL)OXY]- 7,8,9,10-TETRAHYDRO-6,8,11-TRIHYDROXY-8-(HYDROXYACETYL)-1-METOXY-, HYDROCHLORIDE, (8S-CIS)-
ES	20830-81-3	5,12-NAPHTHACENEDIONE, 8-ACETYL-10-[(3-AMINO-2,3,6-TRIDEOXY-.ALPHA.-L-LYXO- HEXOPYRANOSYL)OXY]- 7,8,9,10-TETRAHYDRO-6,8,11-TRIHYDROXY-1-METHOXY-, (8-CIS)-
	112-98-1	5,8,11,14,17-PENTA OXAHENEICOSANE
S	62450-07-1	5H-PYRIDO[4,3-B]INDOL-3-AMINE, 1-METHYL-
S	62450-06-0	5H-PYRIDO[4,3-B]INDOL-3-AMINE, 1,4-DIMETHYL-
E	115-29-7	6,9-METHANO-2,4,3-BENZODIOXATHIEPIN, 6,7,8,9,10,10-HEXACHLORO-1,5,5A,6,9,9A- HEXAHYDRO-, 3-OXIDE
E	33213-65-9	6,9-METHANO-2,4,3-BENZODIOXATHIEPIN, 6,7,8,9,10,10-HEXACHLORO-1,5,5A,6,9,9A- HEXAHYDRO-, 3-OXIDE, (3-ALPHA,5A-ALPHA,6-BETA,9-BETA,9A-ALPHA)-
E	959-98-8	6,9-METHANO-2,4,3-BENZODIOXATHIEPIN, 6,7,8,9,10,10-HEXACHLORO-1,5,5A,6,9,9A- HEXAHYDRO-, 3-OXIDE, (3-ALPHA,5A-BETA,6-ALPHA,9-ALPHA,9A-BETA)-
E	1031-07-8	6,9-METHANO-2,4,3-BENZODIOXATHIEPIN, 6,7,8,9,10,10-HEXACHLORO-1,5,5A,6,9,9A- HEXAHYDRO-, 3,3-DIOXIDE
E	1563-66-2	7-BENZOFURANOL, 2,3-DIHYDRO-2,2-DIMETHYL-, METHYL CARBAMATE
	106-87-6	7-OXABICYCLO[4.1.0]HEPTANE, 3-OXIRANYL-
ES	194-59-2	7H-DIBENZO[C,G]CARBAZOLE
S	10048-13-2	7H-FURO[3',2':4,5]FURO[2,3-C]XANTHEN-7-ONE, 3A,12C-DIHYDRO-8-HYDROXY-6- METHOXY-, (3AR-CIS)-
	112-80-1	9-OCTADECENOIC ACID (Z)-
	26094-13-3	9-OCTADECENOIC ACID (Z)-, COMPD. WITH 1-BUTANAMINE (1:1)
	140-04-5	9-OCTADECENOIC ACID, 12-ACETILOXY-, BUTYL ESTER, (R-(Z))-
ES	82-29-0	9,10-ANTHRACENEDIONE, 1-AMINO-2-METHYL-
ES	117-79-3	9,10-ANTHRACENEDIONE, 2-AMINO-
S	129-15-7	9,10-ANTHRACENEDIONE, 2-METHYL-1-NITRO-
E	86-73-7	9H-FLUORENE

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S—SPECIAL HAZARDOUS SUBSTANCE

#### Authority

The provisions of this Appendix A amended under section 3 of the act of October 5, 1984 (P. L. 734, No. 159) (35 P. S. § 7303).

#### Source

The provisions of this Appendix A adopted August 1, 1986, effective August 2, 1986, 16 Pa.B. 2909; amended August 11, 1989, effective January 1, 1990, 19 Pa.B. 3513. Immediately preceding text appears at serial pages (110017) to (110050).

323-42

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