

APPENDIX 4-A

How to read a MSDS

Material Safety Data Sheets (MSDS) inform the purchasers and users of hazardous chemicals of the properties and hazards of the chemical. The OSHA Hazard Communication Standard, 29 CFR 1910.1200, requires chemical manufacturers and distributors to develop MSDS for their products and provide the MSDS to their customers. Employers are in turn required to make the MSDS available to all employees using or exposed to the product.

OSHA requires that the MSDS contain certain information but does not require a specific format. Consequently, MSDS for different manufacturers often look quite different. The American National Standards Institute has published a recommended 16-part format for MSDS, ANSI Z400.1-1993. That 16-part format is briefly described below.

Section 1: Chemical Product and Company Identification. Gives the chemical name or trade name of the product and the name, address, and telephone number of the manufacturer or distributor.

Section 2: Composition, Information on Ingredients. Lists the chemical components of the products, Chemical Abstract Service numbers, and Permissible Exposure Limits. OSHA allows companies in some cases to claim some ingredients as trade secrets if the appropriate hazard information is provided.

Section 3: Hazard Identification. Describes the material's color, odor and health, physical, and environmental hazards in abbreviated format, primarily for emergency responders.

Section 4: First Aid Measures. Includes emergency and first aid procedures.

Section 5: Fire Fighting Measures. Describes the properties of the product important to its fire hazard, such as flash point and flammability limits, and fire-fighting instructions.

Section 6: Accidental Release Measures. Describes the steps to be taken in the event of a release of the material to safeguard health and the environment.

Section 7: Handling and Storage. Provides guidelines on the proper handling and storage conditions for the product.

Section 8: Exposure Control and Personal Protection. Discusses the need for engineering controls, such as ventilation, and personal protective equipment to protect the user from overexposure to the product including exposure limits.

Section 9: Physical and Chemical Properties. Provides important information on the properties of the product, such as vapor pressure and boiling point that can be used to evaluate hazards.

Section 10: Stability and Reactivity. Describes any conditions that could result in a hazardous reaction including chemical incompatibilities.

Section 11: Toxicological Information. Includes data available from animal tests or human experience on the toxicity of the product.

Section 12: Ecological Information. Lists the potential impacts of the product if released into the environment.

Section 13: Disposal Considerations. Provides guidance on the proper disposal methods for the product.

Section 14: Transport Information. Summarizes Department of Transportation requirements for shipping the material.

Section 15: Regulatory Information. Includes information of the regulatory status of the product including reporting requirements that may apply.

Section 16: Other Information. Manufacturers may provide additional information that they feel is important.