

EPCRA Material Safety Data Sheet

“All chemicals that are used in KSC daily processing operations must have MSDS”

Emergency Planning and Community Right-to-Know Act (EPCRA) §311 and §312 require facilities to notify the State Emergency Response Commission (SERC), the Local Emergency Planning Committee (LEPC), and the local fire department of all hazardous chemicals for which the Occupational Safety and Health Administration (OSHA) requires the material safety data sheets (MSDS). These requirements are found at 40 CFR 370, Hazardous Chemical Reporting: Community Right-to-Know.

The U.S. OSHA is a federal government agency that was created by the Occupational Safety and Health Act of 1970. The OSHA is a federal agency in the U.S. Department of Labor. The primary goals of OSHA are to save lives, prevent injuries and protect the health of America's workers.

The OSHA is responsible for the Hazard Communication Standard (HCS) 29 CFR 1910.1200. The purpose of this standard is “to ensure that the hazards of all chemicals produced or imported are evaluated, and that information concerning their hazards is transmitted to employers and employees. This transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include container labeling and other forms of warning, material safety data sheets (MSDS) and employee training.”

A MSDS is designed to provide both workers and emergency personnel with the proper procedures for handling or working with a particular substance. The MSDS is intended for: a) Employees who may be occupationally exposed to a hazard at work; b) Employers who need to know the proper methods for storage etc, and c) Emergency responders such as fire fighters, hazardous material crews, emergency medical technicians, and emergency room personnel.

The HCS specifies the required elements that must be on an MSDS among other important data. OSHA has a suggested Form 174 format for MSDS, but Form 174 format is not mandatory. However, an MSDS cannot contain less information than the suggested Form 174 format. The Form 174 includes the following information:

Chemical Identity - The identity of the substance as it appears on the label.

Section I - Manufacturer's Name and Contact Information: Manufacturer's name, address, telephone number and emergency telephone number and the date the MSDS was prepared.

Section II - Hazardous Ingredients/Identity Information: Lists the hazardous components by chemical identity and other common names. The information includes OSHA Permissible Exposure Limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Level Value (TLV) and other recommended exposure limits. Percentage listings of the hazardous components are optional.

Section III - Physical/Chemical Characteristics of the Substance: Boiling point, vapor pressure, vapor density, specific gravity, melting point, evaporation rate, solubility in water, physical appearance and odor.

Section IV - Fire and Explosion Hazard Data: Flash point, flammability limits, extinguishing media, special firefighting procedures, unusual fire and explosion hazards.

Section V - Reactivity Data: Stability, conditions to avoid, incompatibility, hazardous decomposition or byproducts, hazardous polymerization.

Section VI - Health Hazard Data: Routes of entry such as inhalation, skin or ingestion, health hazards (acute ~ immediate or chronic ~ build up over time), carcinogenic (by National Toxic Program, by International Agency for Research on Cancer, by OSHA or by ACGIH), signs and symptoms of exposure, medical conditions generally aggravated by exposure, emergency and first aid procedures.

Section VII - Precautions for Safe Handling and Use: Steps to be taken in case material is released or spilled, waste disposal method, precautions to be taken in handling or storage, other precautions.

Section VIII - Control Measures: Respiratory protection type, ventilation (local, mechanical exhaust, special or other), protective gloves, eye protection, other protective clothing or equipment, work/hygienic practices.