



OSHA-Required Health And Safety Information!

This Material Safety Data Sheet (MSDS) was requested moments ago from Hercules Automated Fax Information System. Please forward it immediately to the person in charge of MSDS's, or retain it at the machine until claimed.

Section 1

MATERIAL SAFETY DATA SHEET # #192001

204

MATERIAL SAFETY FORMATION SERVICE

Date Prepared: 11/17/1999

Last Reviewed: 10/10/2005

Meets OSHA 29 CFR 1910.1200

Hercules Chemical Company Inc. 111 South Street Passaic NJ 07055 Phone (800) 221-9330 Fax (800) 333-3456

Section 2 - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical

Identity; Common Name(s), CAS Numbers)

OSHA PEL

ACGIH TLV

Other Limits

Upper Bound Limit if SARA Reportable

NOT FOR RETAIL USE OR SALE. KEEP OUT OF REACH OF CHILDREN.

Hydrochloric Acid (CAS 7647-01-0)

 $5 \text{ ppm}(7\text{mg/m}^3)$

5 ppm(7mg/m³) IDLH 50 PPM

31%

HMIS Hazard Rating: Health: 3 Flammability: 0 Reactivity: 1 Personal Protection: H

Section 3 - Physical/Chemical Characteristics

Boiling Point (°F):

Specific Gravity

Vapor Density

Vapor Pressure

182° F

1.16

1.27

35

Melting Point (° F

Evaporation Rate:

Solubility in Water:

(Butyl Acetate = 1)

N/A

>1

Completely soluble

Appearance And Color:

Yellow Liquid

Odor:

Sharp, pungent, suffocating odor

Section 4 - Fire And Explosion Hazard Data

Flash Point

Flammable Limit

LEL:

UEL: N/A

None

N/A

Extinguishing Media: As suitable for surrounding fire. Water spray to cool container area. Do NOT get solid streams of water directly in containers--violent reaction can occur.

Special Firefighting Procedures:

Product is non-flammable, but corrosive HCl vapors may be present. Fire fighters exposed to these vapors should wear NIOSH/OSHA lapproved SCBA and full protective acid-resistant clothing. Thoroughly decontaminate equipment after exposure. Neutralize any spillages with soda ash, slaked lime or other alkaline substances to avoid formation of potentially explosive hydrogen gas. Cool containers with water to prevent overheating and bursting. Unusual Fire And Explosion Hazards:

Product is non-flammable, but will react with a variety of types of metals to form flammable/explosive hydrogen gas. Continued on Next Page

Section 5 - Reactivity Data

Stability: Stable

Conditions To Avoid: Do NOT store near heat or near strongly alkaline chemicals.

Incompatability

Corrosive to metals with evolution of hydrogen gas. May react with strong oxidizers, cyanides,

(Materials To Avoid):

sulfides or formaldehyde to form toxic gases.

Hazardous Decomposition:

Hydrogen chloride gas, hydrogen gas and chlorine gas.

Hazardous Polymerization:

Will Not Occur

Section 6 - Health Hazard Data

Inhalation Yes

Skin Yes

Ingestion Yes

Routes of Entr **Health Hazard**

CORROSIVE TO ALL BODY TISSUES. EYES: Mist or solution rapidly causes sever irritation of the eyes and eyelids if not removed by prompt and thorough irrigation with water. Liquid can cause irritation, corneal burns, and conjunctivitis leading to severe or permanent injury and/or loss of sight. SKIN: Contact with liquid causes severe burns unless immediately and thoroughly washed off. Exposure to concentrated mist may cause burns or dermatitis. INGESTION: If swallowed, will cause serious burns to mucous membranes of the mouth, throat, and stomach, or perforation of the esophagus and/or stomach. Ingestion can be fatal. INHALATION: Mist causes irritation or corrosive burns to respiratory system, including nose, mouth, throat and esophagus, with immediate pain and difficulty in swallowing. Lung irritation as well as laryngeal, tracheobronchial, and pulmonary edema can also occur. Inhalation may be fatal.

Carcinogenicit

NTP NO IARC NO

OSHA Regulated NO

Signs And Symptoms of Exposure:

See "Health Hazards" above. Repeated or prolonged exposure to low concentrations have been reported to cause; erosion of teeth, irritation and lesion of skin, tracheobronchitis, mouth inflammation, conjunctivitis, and frequent respiratory infections, emphysema, and digestive disorders.

Medical Conditions Generally Aggravated By Exposure:

Chronic respiratory diseases or conditions including asthma, bronchitis, emphysema, nervous system diseases, eye and skin disorders and conditions.

Emergency And First Aid Procedures:

EYES: Flush with plenty of gently running water for at least 15 minutes. Forcibly hold eyelids apart to ensure flushing of all eye and eyelid tissue Washing eyes within 1 minute is essential to achieve maximum effectiveness. Get immediate medical attention, but do not transport unless flushing is completed or can be continued in transit. SKIN: Flush contaminated areas thoroughly with plenty of water for at least 15 minutes. Remove contaminated clothing. If large areas of the body are contaminated or clothing is penetrated, immediately use safety shower. Remove contaminated clothing and footwear. After washing skin cover affected area with moist milk of magnesia or baking soda. GET IMMEDIATE MEDICAL ATTENTION, but complete flushing prior to transport. Wash and decontaminate clothing/footwear. INHALATION: Remove to fresh air. CALL EMERGENCY MEDICAL CARE. IF breathing has stopped, use artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. INGESTION: Do NOT induce vomiting. Give large amounts of water or milk and immediately call EMERGENCY MEDICAL CARE. Do not give carbonates. If vomiting occurs, keep airways clear. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. NOTE TO PHYSICIANS: This material is extremely corrosive to all body tissues. IF swallowed, gastric lavage should be used only with extreme caution.

Continued on Next Page

Section 7 - Precautions For Safe Handling And Use:

Steps To Be Taken In Case Material Is Released Or Spilled:

SMALL SPILLS: Do not allow any contact with acid, mist, or vapors. Dilute spill with copious amounts of water, If practical and safe flush to sewer. Neutralize remaining mat'l with baking soda. If flushing to sewer is not safe, contain diluted spill with any inert absorbent then neutralize with baking soda (sodium bicarbonate). FOR LARGER SPILLS: Use NIOSH/OSHA respirator and full protective clothing. No skin surface should be exposed. Notify fire/health authorities. Neutralize with lime or soda ash. If applicable due to runoff, notify pollution authorities. Waste Disposal Method:

Materials resulting from cleanup may be hazardous. Package, store, transport and dispose of in accordance with appropriate Federal, State and Local regulations. Be sure that all responsible agencies are informed of disposal. Precautions To Be Taken In Handling And Storing:

Handle with extreme care. Store containers upright during transportation, storage and handling. Have applicable first aid equipment and running water available. NEVER add cold water to product in container. Do not use or mix with any other chemical -- a violent eruption of hot corrosive acid can occur. Store in upright position at floor level only Other Precautions:

Face shield and full protective clothing.

Section 8 - Control Measures:

Respiratory Protection:

NIOSH/OSHA Respirator where applicable

Ventilation: Local Exhaust Use only in well ventilated areas.

Mechanic See local exhaust Special Acid-resistant gloves, apron, and safety

shoes.

Other N/A

Gloves

Acid resistant

Eye Protection:

Chemical Safety Goggles. Have eye bath available.

Other Protective

Clothina:

Acid Resistant

Work/Hygienic Practice Safety Shower

Additional Information:

DOT B/L Description: Hydrochloric Acid, Solution 8, UN 1789, PG II

DOT Hazard Class Information: Corrosive Placard over 1000 pounds

NJ Right-To-Know Labeling Information:

All information required is shown in Section 2 above





For Hercules Material Safety Data Sheets by fax anytime, day or night, just call 1-800-942-INFO (1-800-942-4636) from any Touch-Tone phone. Have your fax number ready. Checking the product label for the correct MSDS # will save time.