Faxed AST!

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 SHEE Block | | ATERIAL AFETY IRMATION ERVICE | | |
|---|--|--|--------------|--|
| Date Prepared: 10/1/1989 Last Reviewed: | Hercules Chemical Company Inc. 111 South Street Passaic NJ 07055 Phone (800) 221-9330 Fax (800) 333-3456 | | | |
| Meets OSHA 29 CFR 1910.1200 | | | | |
| Section 2 - Hazardous Ingredients/Identity Inform | mation | | | |
| Hazardous Components (Specific Chemical Identity; Common Name(s), CAS Numbers) | OSHA PEL | ACGIH TLV (TWA) | Other Limits | Upper Bound Limit if SARA Reportable |
| Isopropanol (67-63-0) | 400ppm | 200ppm | N/A | |

HMIS Hazard Rating: Health: 1 Flammability: 2 Reactivity: 0 Personal Protection: G

| Section 3 - Physical/C | hemical Characteristi | cs | | | |
|--|--|--------------------------------|-----------------------------|----------------------------|------|
| Boiling Point (°F): 180 (For Isopropanol) | | Specific Gravity (H2O = 1): | Vapor Density (Air = 1): | Vapor Pressur (mm Hg): | |
| | | 1.29 | 2.07 | at 20° C (For Isopropanol) | |
| Melting Point (° F) | Evaporation Rate: (Butyl Acetate = 1) | Solubility in Water: | | | 33 |
| N/A | N/A | Insoluble | | | |
| Appearance And Color: | Greenish-blue pas | te | Odor: Alcohol odor | | |
| Section 4 - Fire And | Explosion Hazard Dat | a | | | |
| Flash Point: | | | Flammable Limits | LEL: | UEL: |
| (For Isopropanol) 53° F T.C.C. | | N/A | 2% | 12.0% | |

Extinguishing Media: Use dry chemical or alcohol type foam or water spray or carbon dioxide.

Special Firefighting Procedures:

Caution: Combustible mixture, use self contained breathing apparatus when handling fires in confined spaces. Use water spray to cool fire exposed surfaces.

Unusual Fire And Explosion Hazards:

Vapors from the product, being heavier than air, may travel to pilot lights and other sources of ignition. Extinguish all such sources of ignition.

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Section 5 - Reactivity Data Conditions To Avoid: Heat, sparks and open flame. Stability: Stable Incompatability Avoid concentrated nitric and sulfuric acids, strong oxidizers, aldehydes and halogens. (Materials To Avoid): Hazardous Decomposition: Burning may produce carbon monoxide and carbon dioxide. Hazardous Polymerization: Will not occur Section 6 - Health Hazard Data Routes of Entry Inhalation YES/Primary Skin YES/Primary Ingestion YES/Secondary **Health Hazards** Ingestion of large quantity may cause drowsiness and loss of consciousness. NTP IARC NO Carcinogenicity OSHA Regulated NO NO Signs And Symptoms of Exposure:

INGESTION: Slightly toxic. Ingestion of a large quantity may cause drowsiness and loss of consciousness. Stomach cramps, pain, nausea, vomiting and diarrhea may also occur. INHALATION: concentration may cause mild irritation of eyes, nose and throat. Concentration above the TLV may result in headache and drowsiness. SKIN CONTACT: No evidence of adverse effects from available information on skin absorption, but prolonged contact may cause drying and cracking of skin. EYE CONTACT: May cause slight to moderate irritation with possible corneal injury.

Medical Conditions Generally Aggravated By Exposure:

See exposure.

Emergency And First Aid Procedures:

INGESTION: DO NOT INDUCE VOMITING. If conscious, dilute by giving large quantities of water or milk. Call a physician immediately. INHALATION: Remove to fresh air. If not breathing, give artificial respiration preferably mouth to mouth. If breathing is difficult, give oxygen. Call a physician. SKIN CONTACT: Wash the affected area with soap and water. Remove contaminated clothing. EYE CONTACT: Immediately flush eyes with plenty of water for 15 minutes. Get medical attention.

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| Section 7 - Precautions For Safe Handling And Use: | | | | |
|--|--------------------------|--|---|--|
| Steps To Be Taken | In Case | e Material Is Released Or Spilled: | | |
| Use absorbent ma material. | aterial to | to pick up small spills. For large spills extinguish any ignition source & pick up with absorben | : | |
| Waste Disposal Me | thod: | | | |
| Small spills: Non- | Hazard | dous landfill. Large spills: Dispose of in accordance with federal, state, & local regulations. | | |
| Precautions To Be | Taken In | n Handling And Storing: | | |
| Keep away from h ventilation. | neat, spa | parks and flame. Avoid contact with eyes. Keep container closed. Use with adequate | | |
| Other Precautions: | | | | |
| None | | | | |
| Section 8 - Contr | ol Meas | isures: | | |
| Respiratory Protect None normally red vapor exceeds 40 | quired. | When handling large quantities, use self-contained breathing apparatus if concentration of | | |
| Ventilation: Local | Exhaust | t N/A Special N/A | | |
| Mecha | inical | Acceptable Other: N/A | | |
| Gloves: | Butyl ru | rubber gloves. | | |
| Eye Protection: | Chemical splash goggles. | | | |
| Other Protective Clothing: | NONE | | | |

Work/Hygienic Practice: Wash thoroughly after handling.



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.