

MATERIAL SAFETY DATA SHEET

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1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: HYDROSIZE[®] HP-1632

Product Family: Polymer Solution

Product CAS Number: - See TSCA Status, Section 11.

Effective Date: 12/15/2003

MSDS Number: HP-1632

HMIS Rating: Health = 2 Fire = 0 Reactivity = 0

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2 INFORMATION ON HAZARDOUS COMPONENTS

<u>Ingredients</u>	<u>CAS#</u>	<u>Maximum Content</u>	<u>Exposure Limits</u>
Polymer Solids	Proprietary	11.0% ± 1%	None assigned
Dimethylaminoethanol	108-01-0	< 3.0%	None assigned
Tetrahydrofuran	109-99-9	< 0.4%	200 PPM
Water	7732-18-5	86%± 2%	None assigned

3 PHYSICAL DATA

- ◆ Boiling Point: >212 F
- ◆ Volatile %: 88 - 90% by weight
- ◆ Evaporation Rate: Slower than ether
- ◆ Vapor Density: Heavier than Air
- ◆ Specific Gravity: >1.0
- ◆ Appearance: Yellow to Amber Liquid Solution

4 FIRE FIGHTING MEASURES

- ◆ Flammability Class: N/A
- ◆ Flash Point: N/A
- ◆ LEL: N/A
- ◆ Extinguishing Media: Water, Carbon Dioxide, or Dry Chemical
- ◆ Special Firefighting Procedures: Firefighters and others exposed to vapors or products of combustion should wear self-contained breathing apparatus.
- ◆ Unusual Fire and Explosion Hazards: The product vapor is heavier than air and may travel a considerable distance to a source of ignition and flashback.
- ◆ NFPA Ratings:
 - Health: 2
 - Flammability: 0
 - Reactivity: 0
 - Specific Hazard: None

5 HEALTH HAZARD DATA

- ◆ Permissible Exposure Level: Tetrahydrofuran, OSHA; 200 ppm ceiling, ACGIH; 250 PPM
- ◆ Primary Route(s) of Entry: Inhalation of vapors (especially if sprayed or heated)
- ◆ Effects of Overexposure:
 - Skin: This product may cause skin irritation or rash upon prolonged exposure or repeat contact

HYDROSIZE® HP-1632

◆ Effects of Overexposure (Continued):

Inhalation: Excessive exposure to vapors or spray mists can cause irritation of eyes, nose and Throat. High concentrations of Dimethylaminoethanol may cause nausea and vomiting. Repeated exposure of Dimethylaminoethanol may produce stimulation of the nervous system and cause convulsions in susceptible individuals. Overexposure to tetrahydrofuran may produce nausea, dizziness, headaches, respiratory irritation and possible skin burns.

Eyes: This product may be an eye irritant.

◆ Toxicological Information: This product contains Tetrahydrofuran, which under prolonged and excessive exposure may produce liver and kidney injury. This product contains one or more amines which may react with nitrites to form nitrosamines. Some nitrosamines have been shown to be carcinogenic in laboratory animals.

6 FIRST AID INFORMATION:

◆ Skin: Wash with soap and water immediately. Remove contaminated clothing. Get medical attention if irritation develops or persists.

◆ Eyes: Flush with large quantities of water for 15 minutes and seek medical attention.

◆ Ingestion: If ingested call a physician at once

◆ Inhalation: Remove affected individual(s) to fresh air. Seek medical attention.

7 REACTIVITY DATA

◆ Stability: Stable

◆ Hazardous Polymerization: Will not occur

◆ Incompatibility: Strong oxidizing agents, acids, and alkali/base/caustic solutions

◆ Conditions to Avoid: Freezing

◆ Hazardous Decomposition Products: Under severe thermal degradation low molecular weight organic compounds can be formed

8 ACCIDENTAL RELEASE MEASURES

◆ Ensure cleanup personnel wear all appropriate personal protective equipment. Remove all ignition sources. Keep nonessential personnel away from contaminated area. Prevent this material from entering sewers and watercourses by diking or impounding the spilled material. Advise authorities if the product has entered or may enter, sewers, watercourses, or extensive land areas. Ventilate the contaminated area. Using nonsparking tools, mix appropriate sorbent into the spilled material. Use an absorbent like sawdust. Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable. Label the waste container. Care should be taken to ensure that the material and its containers are disposed of in an approved facility in accordance with current federal, state and local regulations. For further information contact your state or local solid waste agency or the United States Environmental Agency's RCRA hotline at (800) 424-9346 or (202) 382-3000

9 EXPOSURE CONTROLS AND PERSONAL PROTECTION

◆ Exposure Guidelines: There are no exposure limits assigned to the polymer in this product by the Occupational Safety and Health Administration (OSHA) or American Conference of Governmental Industrial Hygienists (ACGIH). This product may contain >0.1% tetrahydrofuran. The exposure limit set by Occupational Safety and Health Administration (OSHA) is 200 PPM and that set by the American Conference of Governmental Industrial Hygienists (ACGIH) is 200 PPM.

9 EXPOSURE CONTROLS AND PERSONAL PROTECTION (Continued)

- ◆Engineering Controls: General ventilation is recommended during normal use. Local ventilation may be required during certain operations to prevent inhalation of vapors
- ◆Respiratory Protection: Not generally required during normal use and handling. Respiratory should be considered if this material is sprayed or heated in a poorly ventilated area.
- ◆Skin Protection: Chemical-resistant nitrile, neoprene or rubber gloves as needed to prevent skin contact.
- ◆Eye Protection: Wear safety glasses with side shields, goggles or a face shield.
- ◆Other Protective Equipment: Wear protective clothing as needed to prevent skin contact. Eye wash station and safety shower should be available.

10 HANDLING AND STORAGE

- ◆Handling: Use with adequate ventilation. Avoid prolonged contact. Keep away from heat or open flame.
- ◆Storage: Store between 5 °C (41 °F) and 35 °C (95 °F). All storage areas and containers should conform to local fire and building codes.

11 REGULATORY INFORMATION

- ◆Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs), Under the reporting requirements of 40 CFR 61 this product contains No HAPs.
- ◆SARA and WHMIS Hazard Classification: This material is not categorized as a hazardous substance as defined by SARA Title III regulations (40 CFR 70). This material is categorized as Not WHMIS Hazardous
- ◆SARA Section 313 Listed Ingredients: This material contains Tetrahydrofuran which is subject to the reporting requirements of 40 CFR 372
- ◆DOT Shipping: This material is Not Regulated by DOT – HMR
- ◆TSCA Status: All components of this material are listed or exempt from being listed on the US Toxic Substances Control Act (TSCA) Inventory
- ◆European Inventory Status (EINECS): All components are either listed or are exempt from being listed on the EINECS chemical inventory.

12 OTHER INFORMATION

- ◆HYDROSIZE[®] TECHNOLOGIES, INC. believes that the data contained herein is factual and is provided in good faith. However, HYDROSIZE[®] TECHNOLOGIES, INC. makes no representation as to its completeness or accuracy. Customers are encouraged to make their own determination as to the suitability of this product for their purpose prior to use. HYDROSIZE[®] TECHNOLOGIES, INC. disclaims responsibility to damages of any kind resulting from the use of this information. There are no warranties or representations, express or implied, including those of merchantability or fitness for a particular purpose with respect to this information or to the product it describes. The exclusive remedy for all proven claims is replacement of our materials, and in no event shall we be liable for special, incidental or consequential damages.