



-----  
2. PHYSICAL DATA (continued)  
-----

APPEARANCE AND ODOR:

Light straw colored liquid with pungent odor.

-----  
3. FIRE AND EXPLOSION HAZARD DATA  
-----

FLASH POINT:..... > 300 F CC

FLAMMABLE LIMITS - LEL:..... N/D

FLAMMABLE LIMITS - UEL:..... N/D

AUTOIGNITION TEMPERATURE:..... N/D

EXTINGUISHING MEDIA:

Water spray, Carbon dioxide, Dry chemical, Foam

SPECIAL FIRE FIGHTING PROCEDURES:

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

See Hazardous Decomposition section for products of combustion.

-----  
4. REACTIVITY DATA  
-----

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:

Strong Bases, Alcohols, Water, Finely divided active metals.

HAZARDOUS POLYMERIZATION: Hazardous polymerization may occur.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide and Carbon Dioxide, Oxides of Nitrogen, Hydrogen Cyanide.

-----  
5. ENVIRONMENTAL INFORMATION  
-----

SPILL RESPONSE:

Observe precautions from other sections. Ventilate area. Contain spill. Evacuate unprotected personnel from hazard area. Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Alternatively, pour water on spill and allow to react for more than

-----  
Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

-----  
5. ENVIRONMENTAL INFORMATION (continued)  
-----

30 minutes. Cover with absorbent. Place in an approved drum, but do not seal the drum for 48 hours to avoid possible pressure buildup. Neutralize spill residue with decontaminant solution.

RECOMMENDED DISPOSAL:

Do not release to waterways or sewer. Incinerate in an industrial or commercial facility in the presence of a combustible material.

ENVIRONMENTAL DATA:

Not determined.

REGULATORY INFORMATION:

Volatile Organic Compounds: N/D.  
VOC Less H2O & Exempt Solvents: N/D.

Since regulations vary, consult applicable regulations or authorities before disposal. U.S. EPA Hazardous Waste Number = None (Not U.S. EPA Hazardous).

EPCRA HAZARD CLASS:

FIRE HAZARD: No PRESSURE: No REACTIVITY: Yes ACUTE: Yes CHRONIC: Yes

-----  
6. SUGGESTED FIRST AID  
-----

EYE CONTACT:

Immediately flush eyes with large amounts of water. Get immediate medical attention.

SKIN CONTACT:

Immediately wash skin with soap and large amounts of water. Remove contaminated clothing. If signs/symptoms occur, call a physician. Wash contaminated clothing before reuse and dispose of contaminated shoes.

INHALATION:

Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

IF SWALLOWED:

Drink two glasses of water. Call a physician.

-----  
Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

-----  
7. PRECAUTIONARY INFORMATION  
-----

EYE PROTECTION:

Avoid eye contact. The following should be worn alone or in combination, as appropriate, to prevent eye contact: Wear vented goggles. Wear full-face shield.

SKIN PROTECTION:

Avoid skin contact. Wear appropriate gloves when handling this material. A pair of gloves made from the following material(s) are recommended: butyl rubber, nitrile rubber. Use one or more of the following personal protection items as necessary to prevent skin contact: apron. Protective garments (other than gloves) should be made of either of the following materials: butyl rubber, nitrile rubber.

RECOMMENDED VENTILATION:

Use with appropriate local exhaust ventilation. Provide appropriate local exhaust when product is heated. Use in a well-ventilated area. Provide sufficient ventilation to maintain emissions below recommended exposure limits. If exhaust ventilation is not adequate, use appropriate respiratory protection.

RESPIRATORY PROTECTION:

Avoid breathing of vapors. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: half-mask organic vapor respirator, full-face organic vapor respirator.

PREVENTION OF ACCIDENTAL INGESTION:

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Wash hands after handling and before eating. Do not ingest.

RECOMMENDED STORAGE:

Store in a cool place. Store away from heat. Store out of direct sunlight. Keep container dry. Keep container closed when not in use. Keep container in well-ventilated area. Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:

Keep container tightly closed. Keep away from heat, sparks, open flame, and other sources of ignition. Do not pierce or burn container, even after use. Do not heat under confinement.

OTHER PRECAUTIONARY INFORMATION:

For industrial or professional use only.

HMIS HAZARD RATINGS: HEALTH: 3 FLAMMABILITY: 1 REACTIVITY: 1  
PERSONAL PROTECTION: X (See precautions, section 7.)

-----  
Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

-----  
7. PRECAUTIONARY INFORMATION (continued)  
-----

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
1,1'- METHYLENEBIS(ISOCYANATOBENZENE)....	0.005	PPM	TWA	ACGIH	
1,1'- METHYLENEBIS(ISOCYANATOBENZENE)....	0.02	PPM	CEIL	OSHA	
Polyether-Hydrocarbon-Urethane Polymer.....	NONE	NONE	NONE	NONE	
1,2-BENZENEDICARBOXYLIC ACID, DIUNDECYL ESTER, BRANCHED AND LINEAR.....	NONE	NONE	NONE	NONE	
BENZENE, 1,1'- METHYLENEBIS[ISOCYANATO-, HOMOPOLYMER.....	NONE	NONE	NONE	NONE	

\* SKIN NOTATION: Listed substances indicated with 'Y' under SKIN refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration
- NONE: None Established

-----  
8. HEALTH HAZARD DATA  
-----

EYE CONTACT:

Moderate Eye Irritation: signs/symptoms can include redness, swelling, pain, tearing, and hazy vision.

SKIN CONTACT:

Moderate Skin Irritation: signs/symptoms can include redness, swelling, itching, and dryness.

Prolonged or repeated exposure may cause:

Allergic Skin Reaction: signs/symptoms can include redness, swelling, blistering, and itching.

INHALATION:

Serious illness requiring medical attention or death may result from a single exposure by inhalation to a relatively small amount of this material.

-----  
Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

-----  
8. HEALTH HAZARD DATA (continued)  
-----

Prolonged or repeated exposure may cause:

Allergic Respiratory Reaction: signs/symptoms can include difficulty breathing, wheezing, tightness of chest, and respiratory failure.

Prolonged or repeated overexposure, above recommended guidelines, may cause:

Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.

Lung Damage: signs/symptoms can include coughing, difficulty breathing, wheezing, tightness in chest, congestion, and coughing up of blood.

IF SWALLOWED:

Ingestion may cause:

Irritation of Gastrointestinal Tissues: signs/symptoms can include pain, vomiting, abdominal tenderness, nausea, blood in vomitus, and blood in feces.

Central Nervous System Depression: signs/symptoms can include headache, dizziness, drowsiness, muscular weakness, incoordination, slowed reaction time, fatigue, blurred vision, slurred speech, giddiness, tremors and convulsions.

-----  
SECTION CHANGE DATES  
-----

INGREDIENTS                      SECTION CHANGED SINCE August 17, 1999                      ISSUE

-----  
Abbreviations: N/D - Not Determined    N/A - Not Applicable    CA - Approximately

-----  
The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from 3M.