MATERIAL SAFETY 3M DATA SHEET 3M Center St. Paul, Minnesota 55144-1000 1-800-364-3577 or (651) 737-6501 (24 hours) Copyright, 1999, Minnesota Mining and Manufacturing Company. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: 1) the information is copied in full with no changes unless prior agreement is obtained from 3M, and 2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon. DIVISION: HOME AND COMMERCIAL CARE DIVISION TRADE NAME: 3M TROUBLE SHOOTER ID NUMBER/U.P.C.: JN-9010-0001-6 ISSUED: July 28, 1999 SUPERSEDES: February 27, 1997 DOCUMENT: 06-0331-6 \_\_\_\_\_ 1. INGREDIENT C.A.S. NO. PERCENT \_\_\_\_\_ - 85 7732-18-5 70 WATER..... - 20 2-BUTOXYETHANOL.... 111-76-2 10 < 5 BUTANE..... 106-97-8 < 5 ETHANOLAMINE..... 141-43-5 1 - 5 IN CASE OF EMERGENCY: THE NUMBERS AT THE TOP OF THIS PAGE PROVIDE 24 HOUR RESPONSE FROM ANY PHONE FOR ALL EMERGENCIES WITH THIS PRODUCT. This product contains the following toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR Part 372: 2-BUTOXYETHANOL \_\_\_\_\_ 2. PHYSICAL DATA \_\_\_\_\_ BOILING POINT:..... 212 F VAPOR PRESSURE:..... N/D VAPOR DENSITY: ..... N/D EVAPORATION RATE: ..... N/D SOLUBILITY IN WATER:.... N/D SPECIFIC GRAVITY:..... 1.005 Water=1 pH:..... 11.8 VISCOSITY: ..... 100 - 500 centipoise MELTING POINT:..... N/D \_\_\_\_\_ Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: 3M TROUBLE SHOOTER July 28, 1999 PAGE 2 \_\_\_\_\_ 2. PHYSICAL DATA (continued) \_\_\_\_\_ APPEARANCE AND ODOR: Liquid in aerosol container, grayish-white, lemon-lime odor. \_\_\_\_\_ 3. FIRE AND EXPLOSION HAZARD DATA \_\_\_\_\_ FLASH POINT:..... N/D 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. Water may not effectively extinguish fire; however, it should be used to keep fireexposed containers and surfaces cool and prevent explosive rupture. UNUSUAL FIRE AND EXPLOSION HAZARDS: See Hazardous Decomposition section for products of combustion. Closed containers exposed to heat from fire may build pressure and explode. NFPA HAZARD CODES: HEALTH: 1 FIRE: 1 REACTIVITY: 1 UNUSUAL REACTION HAZARD: none \_\_\_\_\_ 4. REACTIVITY DATA \_\_\_\_\_ STABILITY: Stable INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID: Heat. HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur. HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide and Carbon Dioxide.

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

\_\_\_\_\_

MSDS: 3M TROUBLE SHOOTER July 28, 1999 PAGE 3 \_\_\_\_\_ 5. ENVIRONMENTAL INFORMATION \_\_\_\_\_ SPILL RESPONSE: Observe precautions from other sections. Ventilate area. Extinguish all ignition sources. Cover with absorbent material. Collect spilled material. Clean up residue with water. Place in a closed container. RECOMMENDED DISPOSAL: Flush spent solutions and small quantities (less than 5 gal.(19 L)) to a wastewater treatment system. Incinerate large quantities in a permitted hazardous waste incinerator. Do not puncture or burn cans in a household incinerator. Facility must be capable of handling aerosol cans. Dispose of empty cans in a sanitary landfill. 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. In the event of an uncontrolled release of this material, the user should determine if the release qualifies as a reportable quantity. U.S. EPA Hazardous Waste Number = D001 (Iqnitable) EPCRA HAZARD CLASS: FIRE HAZARD: NO PRESSURE: Yes REACTIVITY: No ACUTE: Yes CHRONIC: No \_\_\_\_\_ 6. SUGGESTED FIRST AID \_\_\_\_\_ EYE CONTACT: Immediately flush eyes with large amounts of water. Get immediate medical attention. SKIN CONTACT: Flush skin with large amounts of water. If irritation persists, get medical attention. INHALATION: Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention. IF SWALLOWED: Do not induce vomiting. Drink two glasses of water. Call a physician. \_\_\_\_\_ Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: 3M TROUBLE SHOOTER July 28, 1999 PAGE 4 \_\_\_\_\_ 7. PRECAUTIONARY INFORMATION \_\_\_\_\_ EYE PROTECTION: Avoid eye contact. SKIN PROTECTION: Avoid prolonged or repeated skin contact. RECOMMENDED VENTILATION: Use in a well-ventilated area. Provide sufficient ventilation to maintain emissions below recommended exposure limits. RESPIRATORY PROTECTION: Avoid prolonged breathing of spray or mists. PREVENTION OF ACCIDENTAL INGESTION: Do not ingest. RECOMMENDED STORAGE: Store at temperatures below 120 degrees F (49 degrees C). Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE: Aerosol container contains flammable gas under pressure. Do not pierce or burn container, even after use.

## EXPOSURE LIMITS

WATERNONENONENONENONE2-BUTOXYETHANOL25PPMTWAACGIHY2-BUTOXYETHANOL25PPMTWAOSHAYPROPANE1000PPMTWAOSHAYPROPANE2500PPMTWAACGIHBUTANE800PPMTWAACGIHBUTANE800PPMTWAOSHAETHANOLAMINE3PPMTWAACGIH	INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
ETHANOLAMINE   3   PPM   TWA   OSHA     ETHANOLAMINE   6   PPM   STEL   OSHA     ETHANOLAMINE   6   MG/M3   TWA   OSHA	WATER. 2-BUTOXYETHANOL. 2-BUTOXYETHANOL. PROPANE. PROPANE. BUTANE. BUTANE. ETHANOLAMINE. ETHANOLAMINE. ETHANOLAMINE. ETHANOLAMINE.	NONE 25 25 1000 2500 800 800 3 6 3 6	NONE PPM PPM PPM PPM PPM PPM PPM PPM PPM PP	NONE TWA TWA TWA TWA TWA TWA STEL TWA STEL	NONE ACGIH OSHA ACGIH ACGIH ACGIH ACGIH ACGIH OSHA OSHA	Y

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

MSDS: 3M TROUBLE SHOOTER July 28, 1999

## EXPOSURE LIMITS (continued)

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
- NONE: None Established					
8. HEALTH HAZARD DATA					
EYE CONTACT: Mild Eye Irritation: signs/symptoms pain, and tearing.	s can inclu	de rednes	s, swell:	ing,	
SKIN CONTACT: Mild Skin Irritation (after prolong signs/symptoms can include redness,					
May be absorbed through the skin an those caused by inhalation and/or i	-	effects s	imiliar †	to	
INHALATION: Irritation (upper respiratory): sig of the nose and throat, coughing an			lude sore	eness	
Single overexposure, above recommen	nded guidel	ines, may	cause:		
Central Nervous System Depress headache, dizziness, drowsines time, slurred speech, giddines	ss, incoord	lination,	slowed r		L
IF SWALLOWED: Ingestion is not a likely route of	exposure t	o this pro	oduct.		
Ingestion may cause:					
Irritation of Gastrointestinal include pain, vomiting, abdom vomitus, and blood in feces.			-		
SECTION CHANGE DATES					
PRECAUTIONARY INFO. SECTION CHANGED S	SINCE Febru	ary 27, 1	997 ISS	UE	

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

MSDS: 3M TROUBLE SHOOTER July 28, 1999

PAGE 6

## \_\_\_\_\_

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.