

MATERIAL SAFETY 3M
DATA SHEET 3M Center
St. Paul, Minnesota
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DIVISION: COMMERCIAL CARE DIVISION

TRADE NAME:

3M Brand TROUBLE SHOOTER CLEANER

ID NUMBER/U.P.C.:

61-5000-0313-4	00-48011-08109-0	61-5000-6131-4	00-48011-14001-8
96-0000-0066-9	- - -	FZ-0100-0465-8	- - -
FZ-0100-0466-6	- - -		

ISSUED: February 27, 1998

SUPERSEDES: December 18, 1996

DOCUMENT: 10-2818-2

1. INGREDIENT	C.A.S. NO.	PERCENT
WATER.....	7732-18-5	60 - 90
2-BUTOXYETHANOL.....	111-76-2	10 - 30
ISOBUTANE.....	75-28-5	5 - 10
ETHANOLAMINE.....	141-43-5	1 - 5
PROPANE.....	74-98-6	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:..... ca. 212 F
VAPOR PRESSURE:..... N/D
VAPOR DENSITY:..... N/D
EVAPORATION RATE:..... N/D
SOLUBILITY IN WATER:..... complete
SPECIFIC GRAVITY:..... 0.999 Water=1
PERCENT VOLATILE:..... ca. 98 %
pH:..... ca. 11.8
VISCOSITY:..... N/D

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

2. PHYSICAL DATA (continued)

MELTING POINT:..... N/D

APPEARANCE AND ODOR:

Aerosol, liquid, foamy, viscous, white, bland odor

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... 196 F TCC

Above for liquid; propellant < 0 F

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:

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Closed containers exposed to heat from fire may build pressure and explode.

NFPA HAZARD CODES: HEALTH: 1 FIRE: 2 REACTIVITY: 0

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.

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5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Ventilate area. Extinguish all ignition sources. Collect spilled material. Clean up residue with water. Place in a U.S. DOT-approved container.

RECOMMENDED DISPOSAL:

Flush spent solutions and small quantities (less than 5 gal.(19 L)) to a wastewater treatment system. Reduce discharge rate if foaming occurs. Incinerate in a permitted hazardous waste incinerator in the presence of a combustible material. 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: ca. 275 gms/liter South Coast Air Quality Mgmt Dist Method Rule 443.1, calculated.
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).

All chemicals used in the manufacture of this material are listed on the following chemical inventories: TSCA

EPCRA HAZARD CLASS:

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

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:

If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician.

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6. SUGGESTED FIRST AID (continued)

IF SWALLOWED:

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:

Avoid eye contact.

SKIN PROTECTION:

Avoid prolonged or repeated skin contact.

When direct skin contact is likely, wear a pair of gloves. Gloves made from the following materials are recommended: butyl rubber, nitrile rubber.

RECOMMENDED VENTILATION:

Use in a well-ventilated area. Provide sufficient ventilation to maintain emissions below recommended exposure limits.

RESPIRATORY PROTECTION:

Avoid breathing of vapors, mists or spray.

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

HMIS HAZARD RATINGS: HEALTH: 1 FLAMMABILITY: 2 REACTIVITY: 0
PERSONAL PROTECTION: X (See precautions, section 7.)

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
WATER.....	NONE	NONE	NONE	NONE	
2-BUTOXYETHANOL.....	25	PPM	TWA	ACGIH	Y
2-BUTOXYETHANOL.....	25	PPM	TWA	OSHA	Y
ISOBUTANE.....	NONE	NONE	NONE	NONE	
ETHANOLAMINE.....	3	PPM	TWA	ACGIH	

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EXPOSURE LIMITS (continued)

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
ETHANOLAMINE.....	6	PPM	STEL	ACGIH	
ETHANOLAMINE.....	3	PPM	TWA	OSHA	
ETHANOLAMINE.....	6	PPM	STEL	OSHA	
PROPANE.....	1000	PPM	TWA	OSHA	
PROPANE.....	NONE	NONE	NONE	ACGIH	

Simple asphyxiant

* 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:

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

Prolonged or repeated exposure may cause:

May be absorbed through the skin and produce effects similiar to those caused by inhalation and/or ingestion.

INHALATION:

Single overexposure, above recommended guidelines, may cause:

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

WHILE THE FOLLOWING EFFECTS ARE ASSOCIATED WITH ONE OR MORE OF THE INDIVIDUAL INGREDIENTS IN THIS PRODUCT AND ARE REQUIRED TO BE INCLUDED ON THE MSDS BY THE U.S. OSHA HAZARD COMMUNICATION STANDARD, THEY ARE NOT EXPECTED EFFECTS DURING FORESEEABLE USE OF THIS PRODUCT.

Single overexposure, above recommended guidelines, may cause:

Central Nervous System Depression: signs/symptoms can include headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

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8. HEALTH HAZARD DATA (continued)

IF SWALLOWED:

Ingestion is not a likely route of exposure to this product.

Ingestion may cause:

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

SECTION CHANGE DATES

HEADING	SECTION CHANGED SINCE	December 18, 1996	ISSUE
INGREDIENTS	SECTION CHANGED SINCE	December 18, 1996	ISSUE
FIRE AND EXPL.	SECTION CHANGED SINCE	December 18, 1996	ISSUE
ENVIRONMENTAL INFO.	SECTION CHANGED SINCE	December 18, 1996	ISSUE

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