

MATERIAL SAFETY 3M  
 DATA SHEET 3M Center  
 St. Paul, Minnesota  
 55144-1000  
 1-800-364-3577 or (651) 737-6501 (24 hours)

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DIVISION: COMMERCIAL CARE DIVISION  
 TRADE NAME:

3M Brand HEAVY DUTY MULTI-SURFACE CLEANER CONCENTRATE (Product No. 2,  
 Twist 'n Fill (tm) System)

ID NUMBER/U.P.C.:

70-0705-4313-0 00-48011-19202-9 70-0707-1407-9 00-48011-20795-2  
 70-0708-3990-0 00-48011-19202-9 70-0710-0959-4 00-48011-23901-4

ISSUED: January 07, 2002  
 SUPERSEDES: December 06, 2001  
 DOCUMENT: 06-1681-3

1. INGREDIENT	C.A.S. NO.	PERCENT
1-METHOXY-2-PROPANOL.....	107-98-2	40 - 70
WATER.....	7732-18-5	10 - 30
ETHANOLAMINE.....	141-43-5	10 - 30
HYDROXYALKYL AMINE OXIDES.....	68478-65-9	7 - 13
ISOPROPYL ALCOHOL.....	67-63-0	1 - 5
DODECYLBENZENESULFONIC ACID.....	27176-87-0	1 - 5
2-ETHYL-HEXYLOXYETHANOL.....	1559-35-9	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-ETHYL-HEXYLOXYETHANOL

2. PHYSICAL DATA
BOILING POINT:..... N/D
VAPOR PRESSURE:..... N/D
VAPOR DENSITY:..... N/D
EVAPORATION RATE:..... N/D
SOLUBILITY IN WATER:..... complete
SPECIFIC GRAVITY:..... ca. 0.978 Water=1
PERCENT VOLATILE:..... ca. 95 %

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

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2. PHYSICAL DATA (continued)  
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pH:..... ca. 11.9  
VISCOSITY:..... ca. 10 centipoise  
MELTING POINT:..... N/A

APPEARANCE AND ODOR:

Liquid, colorless to light amber color, fresh scent

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3. FIRE AND EXPLOSION HAZARD DATA  
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FLASH POINT:..... ca. 105 F TCC  
FLAMMABLE LIMITS - LEL:..... N/D  
FLAMMABLE LIMITS - UEL:..... N/D  
AUTOIGNITION TEMPERATURE:..... N/D

EXTINGUISHING MEDIA:

Water spray, Carbon dioxide, Dry chemical, Foam, Alcohol-type 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.  
Closed containers exposed to heat from fire may build pressure and explode.

NFPA HAZARD CODES: HEALTH: 2 FIRE: 2 REACTIVITY: 0  
UNUSUAL REACTION HAZARD: none

OSHA FIRE HAZARD CLASS: Class II Combustible Liquid

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4. REACTIVITY DATA  
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STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:

Strong Oxidizing Agents.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

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4. REACTIVITY DATA (continued)  
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HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide and Carbon Dioxide, Irritant Vapors or Gases.

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5. ENVIRONMENTAL INFORMATION  
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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. Contain spill. Evacuate unprotected personnel from hazard area. Cover with absorbent material. Dilute in a large excess of water. Carefully, and with stirring, add appropriate dilute acid such as sulfamic acid or vinegar. Confirm neutrality. Collect using non-sparking tools. Clean up residue with water. Place in a polyethylene-lined metal container. Do not seal for 48 hours.

RECOMMENDED DISPOSAL:

Dispose of waste product in a hazardous waste facility. Disposal alternative: Incinerate in a permitted hazardous waste incinerator.

ENVIRONMENTAL DATA:

A Product Environmental Data Sheet (PED) is available.

The use of this product is expected to have no significant environmental impact. All components will eventually degrade in the environment.

REGULATORY INFORMATION:

Volatile Organic Compounds: ca. 55 %.  
VOC Less H2O & Exempt Solvents: ca. 55 %.

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 (Ignitable)

TSCA: All chemicals used in the manufacture of this material are in compliance with the US TSCA inventory.

EPCRA HAZARD CLASS:

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

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6. SUGGESTED FIRST AID

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EYE CONTACT:

Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

SKIN CONTACT:

Immediately flush skin with large amounts of water for at least 15 minutes in a chemical safety shower while removing contaminated clothing and shoes. Get immediate medical attention. Wash contaminated clothing before reuse.

INHALATION:

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

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.

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7. PRECAUTIONARY INFORMATION

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EYE PROTECTION:

NOTE: When used as directed and diluted and dispensed with a TWIST'n FILL (tm) Chemical Dispenser, eye contact with the concentrate is not expected to occur. 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:

NOTE: When used as directed and diluted and dispensed with a TWIST'n FILL (tm) Chemical Dispenser, skin contact with the concentrate is not expected to occur. Avoid skin contact. Wear appropriate gloves when handling this material. A pair of gloves made from the following material(s) are recommended: butyl rubber, neoprene, nitrile rubber. Use one or more of the following personal protection items as necessary to prevent skin contact: apron, coveralls.

RECOMMENDED VENTILATION:

NOTE: When used as directed and diluted and dispensed with a TWIST'n FILL (tm) Chemical Dispenser, special ventilation is not required. Use with appropriate local exhaust ventilation. Provide appropriate local exhaust ventilation at transfer points. If exhaust ventilation is not adequate, use appropriate respiratory protection.

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 7. PRECAUTIONARY INFORMATION (continued)  
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RESPIRATORY PROTECTION:

NOTE: When used as directed and diluted and dispensed with a TWIST'n FILL (tm) Chemical Dispenser, respiratory protection is not required. Avoid breathing of vapors, mists or spray. Avoid breathing of airborne material. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: full-face organic vapor respirator.

PREVENTION OF ACCIDENTAL INGESTION:

Wash hands after handling and before eating.

RECOMMENDED STORAGE:

Store away from heat. Keep container in well-ventilated area. Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:

NOTE: When used as directed and diluted and dispensed with a TWIST'n FILL (tm) Chemical Dispenser, container grounding and low static or grounded shoes are not required. Keep container tightly closed. Keep away from heat, sparks, open flame, and other sources of ignition. Prevent all sources of ignition. Ground containers securely when transferring contents. Wear low static or properly grounded shoes. Combustible liquid and vapor.

OTHER PRECAUTIONARY INFORMATION:

NOTE: The above precautionary information presumes that this ready-to-use product has been diluted and dispensed from a TWIST'n FILL (tm) Chemical Dispenser. This product is not intended to be used without prior dilution as specified on the product label.

HMIS HAZARD RATINGS: HEALTH: 3 FLAMMABILITY: 2 REACTIVITY: 0  
 PERSONAL PROTECTION: X (See precautions, section 7.)

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
1-METHOXY-2-PROPANOL.....	100	PPM	TWA	ACGIH	
1-METHOXY-2-PROPANOL.....	150	PPM	STEL	ACGIH	
1-METHOXY-2-PROPANOL.....	100	PPM	TWA	OSHA	
1-METHOXY-2-PROPANOL.....	150	PPM	STEL	OSHA	
WATER.....	NONE	NONE	NONE	NONE	
ETHANOLAMINE.....	3	PPM	TWA	ACGIH	
ETHANOLAMINE.....	6	PPM	STEL	ACGIH	
ETHANOLAMINE.....	3	PPM	TWA	OSHA	
ETHANOLAMINE.....	6	PPM	STEL	OSHA	
ETHANOLAMINE.....	6	MG/M3	TWA	OSHA	
HYDROXYALKYL AMINE OXIDES.....	NONE	NONE	NONE	NONE	

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EXPOSURE LIMITS (continued)

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
ISOPROPYL ALCOHOL.....	400	PPM	TWA	ACGIH	
ISOPROPYL ALCOHOL.....	500	PPM	STEL	ACGIH	
ISOPROPYL ALCOHOL.....	400	PPM	TWA	OSHA	
ISOPROPYL ALCOHOL.....	500	PPM	STEL	OSHA	
DODECYLBENZENESULFONIC ACID.....	NONE	NONE	NONE	NONE	
2-ETHYL-HEXYLOXYETHANOL.....	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:

Chemical Related Eye Burns (chemical corrosivity): signs/symptoms can include cloudy appearance of the cornea, chemical burns, pain, tearing, ulcers, impaired vision or loss of vision.

SKIN CONTACT:

Skin Burns (chemical corrosivity): signs/symptoms can include redness, swelling, itching, pain, blistering, ulceration, sloughing, and scar formation.

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

INHALATION:

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.

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

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

Kidney Effects: signs/symptoms can include reduced urine volume,

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8. HEALTH HAZARD DATA (continued)  
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blood in urine and back pain.

Liver Effects: signs/symptoms can include yellow skin(jaundice)  
and tenderness of upper abdomen.

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.

Aspiration Pneumonitis: signs/symptoms can include coughing,  
difficulty breathing, wheezing, coughing up blood and pneumonia,  
which can be fatal.

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SECTION CHANGE DATES  
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INGREDIENTS SECTION CHANGED SINCE December 06, 2001 ISSUE  
ENVIRONMENTAL INFO. SECTION CHANGED SINCE December 06, 2001 ISSUE  
HEALTH HAZARD DATA SECTION CHANGED SINCE December 06, 2001 ISSUE

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