

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

Copyright, 2001, 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: COMMERCIAL CARE DIVISION

TRADE NAME:

3M Brand GENERAL PURPOSE CLEANER CONCENTRATE (Product No. 8, Twist 'n  
 Fill (tm) System)

ID NUMBER/U.P.C.:

70-0705-4322-1	00-48011-19211-1	70-0705-4323-9	00-48011-19212-8
70-0707-1418-6	00-48011-23006-6	70-0707-1419-4	00-48011-23007-3
70-0708-3998-3	00-48011-19211-1	70-0708-4008-0	00-48011-19212-8
70-0710-0967-7	00-48011-23908-3	70-0710-0968-5	00-48011-23891-8

ISSUED: April 10, 2001

SUPERSEDES: September 21, 2000

DOCUMENT: 06-2098-9

1. INGREDIENT	C.A.S. NO.	PERCENT	
WATER.....	7732-18-5	40	- 70
HYDROXYALKYL AMINE OXIDES.....	68478-65-9	15	- 40
ISOPROPYL ALCOHOL.....	67-63-0	5	- 10
2-ETHYL-HEXYLOXYETHANOL.....	1559-35-9	5	- 10

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:..... ca. 200 F  
 VAPOR PRESSURE:..... N/D  
 VAPOR DENSITY:..... 2.1 Air=1  
 (Isopropyl alcohol)  
 EVAPORATION RATE:..... ca. 1 Water=1  
 SOLUBILITY IN WATER:..... complete  
 SPECIFIC GRAVITY:..... ca. 1.0 Water=1  
 PERCENT VOLATILE:..... ca. 75 %

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

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

pH:..... ca. 8  
VISCOSITY:..... < 100 centipoise  
MELTING POINT:..... N/D

APPEARANCE AND ODOR:

Liquid, red color; citrus fragrance

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

FLASH POINT:..... ca. 102 F  
FLAMMABLE LIMITS - LEL:..... N/D  
FLAMMABLE LIMITS - UEL:..... N/D  
AUTOIGNITION TEMPERATURE:..... N/D

EXTINGUISHING MEDIA:

Water, Carbon dioxide, Dry powder, 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

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

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:

Strong Oxidizing Agents.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

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

-----  
4. REACTIVITY DATA (continued)  
-----

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide and Carbon Dioxide, Oxides of Nitrogen, Irritant  
Vapors or Gases.

-----  
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. Contain spill. Evacuate unprotected personnel  
from hazard area. Cover with absorbent material. Collect using non-  
sparking tools. Clean up residue with water. Place in an approved  
metal container. Seal the container.

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. 15 %.  
VOC Less H2O & Exempt Solvents: ca. 15 %.

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 components 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

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

---

6. SUGGESTED FIRST AID

---

EYE CONTACT:

Immediately flush eyes with large amounts of water for at least 15 minutes. 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:

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

IF SWALLOWED:

Do not induce vomiting. Drink two glasses of water. Call a physician.

---

7. PRECAUTIONARY INFORMATION

---

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. 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. Use in a well-ventilated area. If exhaust ventilation is not adequate, use appropriate respiratory protection.

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

---

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

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

airborne material. 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. Do not ingest.

RECOMMENDED STORAGE:

Store away from heat. Keep container closed when not in use. 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. Prevent all sources of ignition.

OTHER PRECAUTIONARY INFORMATION:

Not intended for consumer sale or use. This product is not intended to be used without prior dilution as specified on the product label.

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

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
WATER.....	NONE	NONE	NONE	NONE	
HYDROXYALKYL AMINE OXIDES.....	NONE	NONE	NONE	NONE	
ISOPROPYL ALCOHOL.....	400	PPM	TWA	ACGIH	
ISOPROPYL ALCOHOL.....	500	PPM	STEL	ACGIH	
ISOPROPYL ALCOHOL.....	400	PPM	TWA	OSHA	
ISOPROPYL ALCOHOL.....	500	PPM	STEL	OSHA	
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

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

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

EYE CONTACT:

Severe Eye Irritation: signs/symptoms can include redness, swelling, pain, tearing, cloudy appearance of the cornea, impaired vision and possible permanently impaired vision.

SKIN CONTACT:

Severe Skin Irritation: signs/symptoms can include redness, swelling, itching, dryness, cracking, blistering, and pain.

INHALATION:

Prolonged or repeated exposure 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.

IF SWALLOWED:

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

Ingestion may cause:

Gastrointestinal Effects: signs/symptoms generally will include abdominal pain.

OTHER HEALTH HAZARD INFORMATION:

A Product Toxicity Summary Sheet is available.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: medical conditions, if any, known to be aggravated by exposure to this product are indicated in the appropriate portions of the Health Hazard Data section of this data sheet.

CARCINOGENS: components of this product, if any, known to cause, or suspected of causing, cancer as determined by OSHA, IARC, or NTP are described in the Health Hazard Data section of this data sheet in accord with the OSHA Hazard Communications Standard, 29 CFR 1910.1200

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

HEADING                      SECTION CHANGED SINCE September 21, 2000 ISSUE  
ENVIRONMENTAL INFO. SECTION CHANGED SINCE September 21, 2000 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.