

3M General Offices  
 3M Center  
 St. Paul, Minnesota 55144-1000  
 612/733 1110

00-01  
 398

Duns No.: 00-617-3082

MATERIAL SAFETY  
 DATA SHEET



DIVISION: PRINTING AND PUBLISHING SYSTEMS

TRADE NAME:

3M DELETION FLUID

3M I.D. NUMBER: 77-9800-7205-0

ISSUED: JANUARY 3, 1989

SUPERSEDES: DECEMBER 21, 1988

DOCUMENT: 10-3258-0

1. INGREDIENT	C.A.S. NO.	PERCENT	EXPOSURE		LIMITS	
			VALUE	UNIT	TYPE	AUTH
2 Methoxyethanol	109-86-4	30.0 - 40.0	1	ppm	TWA	3M
2 Ethoxyethyl Acetate	111-15-9	30.0 - 40.0	5	ppm	TWA	ACGIH
Water	7732-18-5	30.0 - 40.0	NONE	NONE	NONE	NONE
Ammonium fluoride	12125-01-8	1.0 - 5.0	2.5	mg/m <sup>3</sup> F	TWA	ACGIH

SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists
- 3M: 3M Medical Department Guideline
- NONE: None Established

THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICAL OR CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372:

- 2 Methoxyethanol
- 2 Ethoxyethyl Acetate

2. PHYSICAL DATA

BOILING POINT:..... 207.00 F  
 VAPOR PRESSURE:..... N/D  
 VAPOR DENSITY: ..... N/D  
 EVAPORATION RATE:..... N/D  
 SOLUBILITY IN WATER: ..... soluble  
 SP. GRAVITY:..... ca. 1.010 Water = 1  
 PERCENT VOLATILE: ..... > 90.00 %  
 VOLATILE ORGANICS: ..... 638.40 gm/l  
 SEE ENVIRONMENTAL DATA  
 pH: ..... 6.00  
 VISCOSITY: ..... 8.0 CPS  
 APPEARANCE AND ODOR: Colorless-sweet, sharp odor

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... 130 F TCC  
 FLAMMABLE LIMITS - LEL: ..... N/D  
 FLAMMABLE LIMITS - UEL: ..... N/D  
 AUTOIGNITION TEMPERATURE: ... N/D  
 EXTINGUISHING MEDIA:  
 CO2, Foam, Dry Chemicals  
 SPECIAL FIRE FIGHTING PROCEDURES:  
 None  
 UNUSUAL FIRE AND EXPLOSION HAZARDS:  
 None  
 NFPA-HAZARD-CODES: HEALTH 2 FIRE 2 REACTIVITY 0  
 UNUSUAL REACTION HAZARD: None

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

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**4. REACTIVITY DATA**

**STABILITY:** Stable  
**INCOMPATIBILITY - MATERIALS TO AVOID:**  
N/A  
**HAZARDOUS POLYMERIZATION:** Will Not Occur  
**HAZARDOUS DECOMPOSITION PRODUCTS:**  
N/A

**5. ENVIRONMENTAL INFORMATION**

**SPILL RESPONSE:**  
Observe all precautions in Section 7. Extinguish all ignition sources. Collect spilled material, clean up residue and place in Dept. of Transportation approved container. Use absorbent material as needed in cleanup procedure.

**RECOMMENDED DISPOSAL:**  
Reclamation or incineration in a permitted hazardous waste facility capable of meeting applicable regulatory requirements for destruction and removal is preferred. Otherwise, dispose in accordance with applicable regulations.

**ENVIRONMENTAL DATA:**  
U.S. EPA Hazardous Waste Number: D001(ignitable); SCAQMD Rules  
443 and 443.1; Nonphotochemically Reactive; gms VOC/L: 638.4;  
gms VOC/(L-Vw-Ves): 921; Manufactured after July 1, 1987

**SARA HAZARD CLASS:**  
**FIRE HAZARD:** Yes **PRESSURE:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** Yes

**6. SUGGESTED FIRST AID**

**EYE CONTACT:**  
In case of eye contact, immediately flush eyes with plenty of water for at least ten minutes and contact a physician.

**SKIN CONTACT:**  
In case of skin contact, wash affected area with soap and water.

**INHALATION:**  
If respiratory irritation or other symptoms occur, move to fresh air. If breathing has stopped, give artificial respiration and send for medical assistance.

**IF SWALLOWED:**  
If swallowed, immediately induce vomiting and contact a physician.

**OTHER FIRST AID:**  
NONE

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**7. PRECAUTIONARY INFORMATION**

Keep away from flame, heat, sparks and other sources of ignition. Use only in well ventilated areas. Keep container tightly closed when not in use. Do not smoke during use. Avoid eye and skin contact. Wear protective gloves when handling. Avoid breathing vapor. Do not take internally. Keep out of reach of children.

**ADDITIONAL EXPOSURE LIMITS**

INGREDIENTS	EXPOSURE		LIMITS	
	VALUE	UNIT	TYPE	AUTH
2 Methoxyethanol	5	ppm	TWA	ACGIH
2 Methoxyethanol	16	mg/m3	TWA	ACGIH
2 Methoxyethanol	25	ppm	TWA	OSHA
2 Methoxyethanol	80	mg/m3	TWA	OSHA
2 Ethoxyethyl Acetate	27	mg/m3	TWA	ACGIH
2 Ethoxyethyl Acetate	100	ppm	TWA	OSHA
2 Ethoxyethyl Acetate	540	mg/m3	TWA	OSHA
Ammonium fluoride	2.5	mg/m3 F	TWA	OSHA

**SOURCE OF EXPOSURE LIMIT DATA:**

- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration

**8. HEALTH HAZARD DATA**

**EYE CONTACT:** Liquid and vapor may cause eye irritation.

**SKIN CONTACT:** May cause skin irritation. May be absorbed through the skin in harmful amounts. May cause birth defects, male reproductive changes and blood disorders on excessive contact.

**INHALATION:** May cause respiratory system irritation, nervous system impairment, birth defects, male reproductive system changes and blood disorders. Symptoms of acute over exposure may include drowsiness, dizziness, weakness, fatigue, unconsciousness and death. 2-Methoxyethanol has also caused lung and kidney damage in laboratory animals.

**INGESTION:** May cause digestive system irritation, birth defects, male reproductive system changes and blood disorders.

**SECTION CHANGE DATES**

HEADING	SECTION CHANGED SINCE	ISSUE
HEADING	DECEMBER 21, 1988	ISSUE
INGREDIENTS	DECEMBER 21, 1988	ISSUE
PHYSICAL DATA	DECEMBER 21, 1988	ISSUE
ENVIRON. DATA	DECEMBER 21, 1988	ISSUE
HEALTH HAZD. DATA	DECEMBER 21, 1988	ISSUE

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The information on this Data Sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. Any use of the product which is not in conformance with this Data Sheet or which involves using the product in combination with any other product or any other process is the responsibility of the user.