



3M General Offices
 MATERIAL SAFETY
 DATA SHEET

3M Center
 St. Paul, MN 55144-1000
 1-800-364-3577 or (612) 737-6501 (24 hours)

4217

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DIVISION: COMMERCIAL CARE DIVISION
 TRADE NAME: HEAVY DUTY AIRCRAFT CLEANER Ready-to-Use
 (3M Brand Heavy Duty Aircraft Cleaner System)
 (Product No. 72, Twist 'n Fill (tm) System)

ISSUED: JANUARY 21, 1998
 SUPERSEDES: FEBRUARY 28, 1997
 DOCUMENT: 06-2221-7

1. INGREDIENT	G.A.S. NO.	PERCENT
WATER	7732-18-5	1
1-METHOXY-2-PROPANOL	107-98-2	5

NOTE: 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.

2. PHYSICAL DATA

BOILING POINT: ca. 190 F
 VAPOR PRESSURE: N/D
 VAPOR DENSITY: ca. 1 Water = 1
 EVAPORATION RATE: complete
 SOLUBILITY IN WATER: ca. 1 Water = 1
 SP. GRAVITY: ca. 100 %
 PERCENT VOLATILE: ca. 10
 PH: < 100 CPS
 VISCOSITY: N/A
 MELTING POINT: N/A
 FREEZING POINT: N/A
 APPEARANCE AND ODOR: liquid, clear; colorless to light green color; mild fragrance

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: ca. 160 F T.C.C.
 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 and waist and legs, face mask, and protective covering for exposed areas of the head.

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



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4218

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 JANUARY 21, 1998

PAGE: 2 of 5

3. FIRE AND EXPLOSION HAZARD DATA (continued)

UNUSUAL FIRE AND EXPLOSION HAZARDS: No unusual fire or explosion hazards are anticipated. See Hazardous Decomposition Section for further information.
 NFPA HAZARD CODES: HEALTH: 0 REACTIVITY: 0
 UNUSUAL REACTION HAZARD: none
 OSHA FIRE HAZARD CLASS: Class IIIA Combustible Liquid

4. REACTIVITY DATA

STABILITY: Stable
 INCOMPATIBILITY - MATERIALS TO AVOID: None known.
 HAZARDOUS POLYMERIZATION: Will Not Occur
 HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide and Carbon Dioxide, Irritant Vapors or Gases.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE: Observe precautions from other sections. Ventilate area. Contain spill. Cover with absorbent material. Collect spilled material. Clean up residue with water. Place in a closed container.

RECOMMENDED DISPOSAL: Discharge spent solutions and small quantities (less than 5 gal. (19 l)) to a wastewater treatment system. Reduce discharge rate if foaming occurs. Incinerate large quantities in an industrial or commercial incinerator.

ENVIRONMENTAL DATA: A Product Environmental Data Sheet (PED) is available.
 See MSDS for product concentrate.

REGULATORY INFORMATION:
 Volatile Organic Compounds: < 5 %
 VOC Less H2O & Exempt Solvents: < 5 %
 Since regulations vary, consult applicable regulations or authorities before disposal. U.S. EPA Hazardous Waste Number = None (Not U.S. EPA Hazardous).

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

6. SUGGESTED FIRST AID

EYE CONTACT: Immediately flush eyes with large amounts of water. Get immediate medical attention.

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4219

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4220

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DATA SHEET

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JANUARY 21, 1998

PAGE: 3 of 5

PAGE: 4 of 5

6. SUGGESTED FIRST AID

7. PRECAUTIONARY INFORMATION (CONTINUED)

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.

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. Avoid eye contact with vapor, spray, or mist.

SKIN PROTECTION:
Avoid prolonged or repeated skin contact.

VENTILATION PROTECTION:
Use in a well-ventilated area. Use with adequate dilution ventilation.

RESPIRATORY PROTECTION:
Avoid breathing of vapors, mists or spray.

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:
Keep container tightly closed.

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.

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

INGREDIENTS	VALUE	UNIT	TYPE AUTH	SKIN*
WATER	NONE	NONE	NONE	NONE
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

* SKIN NOTATION: Listed substances indicated with "m" 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
- AIHA: American Industrial Hygiene Assoc. Workplace Environmental Exposure Level 6
- OSHA: Occupational Safety and Health Administration
- NONE: None Established

8. HEALTH HAZARD DATA

EYE CONTACT:
Mild Eye Irritation: signs/symptoms can include redness, swelling, pain, and tearing.

SKIN CONTACT:
Mild Skin Irritation (after prolonged or repeated contact): signs/symptoms can include redness, swelling, and itching.

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.

IF SWALLOWED:

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

Ingestion may cause:

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4221



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PAGE: 5 of 5

B. HEALTH HAZARD DATA (continued)

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.

SECTION CHANGE DATES
INGREDIENTS SECTION CHANGED SINCE FEBRUARY 28, 1997 ISSUE

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