

MATERIAL SAFETY  
DATA SHEET**3M**

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**DIVISION:** HOME AND COMMERCIAL CARE DIVISION**TRADE NAME:**

3M Brand FOOD SERVICE DEGREASER CONCENTRATE .....  
(Product No. 7, Twist 'n Fill (tm) System)

<b>ID NUMBER/U.P.C.:</b>	70-0705-2683-8	00-48011-19156-5	70-0705-2684-6	00-48011-19157-2
	70-0705-4320-5	00-48011-19209-8	70-0705-4321-3	00-48011-19210-4
	70-0705-4907-9	00-48011-19312-5	70-0707-1420-2	00-48011-23008-0
	70-0707-1421-0	00-48011-23009-7		

**ISSUED:** FEBRUARY 28, 1997**SUPERSEDES:** DECEMBER 18, 1996**DOCUMENT:** 06-1682-1

1. INGREDIENT	C.A.S. NO.	PERCENT
ETHANOLAMINE .....	141-43-5	30 - 60
1-METHOXY-2-PROPANOL .....	107-98-2	10 - 30
1-OCTYL-2-PYRROLIDINONE .....	2687-94-7	10 - 30
DODECYLBENZENESULFONIC ACID .....	27176-87-0	10 - 30
MINERAL SPIRITS .....	64741-65-7	1 - 5

**NOTE:** IN CASE OF EMERGENCY: THE NUMBER AT THE TOP OF THIS PAGE PROVIDES 24 HOUR RESPONSE FROM ANY PHONE FOR ALL EMERGENCIES WITH THIS PRODUCT.

**2. PHYSICAL DATA**

**BOILING POINT:**..... 248 F  
(CAS 107-98-2)  
**VAPOR PRESSURE:**..... N/D  
**VAPOR DENSITY:**..... N/D  
**EVAPORATION RATE:**..... N/D  
**SOLUBILITY IN WATER:**..... complete  
**SP. GRAVITY:**..... ca. 0.98 Water = 1  
**PERCENT VOLATILE:**..... ca. 85 %  
**pH:**..... 11.5-12.0  
**VISCOSITY:**..... < 100 CPS  
**MELTING POINT:**..... N/A  
**APPEARANCE AND ODOR:** Liquid, amber color, ammonia odor

**3. FIRE AND EXPLOSION HAZARD DATA**

**FLASH POINT:**..... ca. 119 F T.C.C.  
**FLAMMABLE LIMITS - LEL:**..... N/D  
**FLAMMABLE LIMITS - UEL:**..... N/D  
**AUTOIGNITION TEMPERATURE:** ... N/D

MATERIAL SAFETY  
DATA SHEET

MSDS: 3M Brand FOOD SERVICE DEGREASER CONCENTRATE .....  
(Product No. 7, Twist 'n Fill (tm) System)  
FEBRUARY 28, 1997

PAGE: 2 of 7

---

**3. FIRE AND EXPLOSION HAZARD DATA (continued)**

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**EXTINGUISHING MEDIA:**

Water, Carbon dioxide, Dry chemical, 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: corrosive

**OSHA FIRE HAZARD CLASS:** Class II Combustible Liquid

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**4. REACTIVITY DATA**

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**STABILITY:** Stable**INCOMPATIBILITY - MATERIALS TO AVOID:**

None known.

**HAZARDOUS POLYMERIZATION:** Will Not Occur**HAZARDOUS DECOMPOSITION PRODUCTS:**

Carbon Monoxide and Carbon Dioxide, Oxides of Nitrogen, Oxides of Sulfur, Amine Compounds, Toxic Vapors, Gases or Particulates, 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. In the U.S.A., call (612) 733-1110 or (612) 733-6100 for 24-hour spill assistance. 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:**

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. 850 gms/liter.

MATERIAL SAFETY  
DATA SHEET**3M**

MSDS: 3M Brand FOOD SERVICE DEGREASER CONCENTRATE .....  
(Product No. 7, Twist 'n Fill (tm) System)  
FEBRUARY 28, 1997

PAGE: 3 of 7

**5. ENVIRONMENTAL INFORMATION (continued)**

VOC Less H2O & Exempt Solvents: ca. 850 gms/liter.

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

**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 flush skin with large amounts of water. Remove contaminated clothing. If irritation persists, call a physician. 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, do NOT induce vomiting. Give victim two glasses of water. Call a physician immediately. Never give anything by mouth to an unconscious person.

**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 unvented goggles during operations in which exposure is likely. 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,

MATERIAL SAFETY  
DATA SHEET

MSDS: 3M Brand FOOD SERVICE DEGREASER CONCENTRATE .....  
(Product No. 7, Twist 'n Fill (tm) System)  
FEBRUARY 28, 1997

PAGE: 4 of 7

---

**7. PRECAUTIONARY INFORMATION (continued)**

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nitrile rubber. Use one or more of the following personal protection items as necessary to prevent skin contact: apron, coveralls.

**VENTILATION PROTECTION:**

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 sufficient ventilation to maintain emissions below recommended exposure limits. 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 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, full-face pressure demand self-contained breathing apparatus.

**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 in a cool place. Keep container closed when not in use. Keep container in well-ventilated area. 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. Combustible liquid and vapor.

**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: 3 FLAMMABILITY: 2 REACTIVITY: 0  
PERSONAL PROTECTION: X (See precautions, section 7.)

INGREDIENTS	EXPOSURE LIMITS		TYPE	AUTH	SKIN*
	VALUE	UNIT			
ETHANOLAMINE .....	3	ppm	TWA	ACGIH	
ETHANOLAMINE .....	6	ppm	STEL	ACGIH	
ETHANOLAMINE .....	3	ppm	TWA	OSHA	
ETHANOLAMINE .....	6	ppm	STEL	OSHA	
1-METHOXY-2-PROPANOL .....	100	ppm	TWA	ACGIH	
1-METHOXY-2-PROPANOL .....	150	ppm	STEL	ACGIH	



MATERIAL SAFETY  
DATA SHEET

MSDS: 3M Brand FOOD SERVICE DEGREASER CONCENTRATE .....  
 (Product No. 7, Twist 'n Fill (tm) System)  
 FEBRUARY 28, 1997

PAGE: 5 of 7

**7. PRECAUTIONARY INFORMATION (continued)**

INGREDIENTS	EXPOSURE LIMITS		TYPE	AUTH	SKIN*
	VALUE	UNIT			
1-METHOXY-2-PROPANOL .....	100	ppm	TWA	OSHA	
1-METHOXY-2-PROPANOL .....	150	ppm	STEL	OSHA	
1-OCTYL-2-PYRROLIDINONE .....	NONE	NONE	NONE	NONE	
DODECYLBENZENESULFONIC ACID .....	NONE	NONE	NONE	NONE	
MINERAL SPIRITS .....	300	ppm	TWA	CMRG	
MINERAL SPIRITS .....	400	ppm	STEL	CMRG	

\* 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
- AIHA: American Industrial Hygiene Assoc. Workplace Environmental Exposure Level
- OSHA: Occupational Safety and Health Administration
- CMRG: Chemical Manufacture Recommended Guidelines
- 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:**

Illness may occur after a single exposure by skin contact to relatively large quantities of this material.

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

MATERIAL SAFETY  
DATA SHEET

MSDS: 3M Brand FOOD SERVICE DEGREASER CONCENTRATE .....  
(Product No. 7, Twist 'n Fill (tm) System)  
FEBRUARY 28, 1997

PAGE: 6 of 7

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**8. HEALTH HAZARD DATA****(continued)**

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soreness of the nose and throat, coughing and sneezing.

Irritation (lower respiratory): signs/symptoms can include coughing, congestion, irritation of throat, wheezing and difficulty breathing.

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.

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

Kidney Effects: signs/symptoms can include reduced urine volume, blood in urine and back pain.

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

Nervous System Effects: signs/symptoms can include emotional changes, lack of coordination, tremors and sensory loss.

Pulmonary Edema: signs/symptoms can include coughing, congestion, difficulty breathing, which can result in respiratory failure and death.

**IF SWALLOWED:**

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

Ingestion may cause:

Damage to Gastrointestinal Tissues: signs/symptoms can include pain, vomiting, nausea, abdominal tenderness, burns of mouth, difficulty swallowing, blood in vomitus, blood in feces, and ulceration.

Esophageal Burns: signs/symptoms can include pain in throat, difficult swallowing and blood in sputum.

Burns of the Oral Tissues: signs/symptoms can include pain, burns of tongue and inside of mouth, redness and tissue loss.

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

**OTHER HEALTH HAZARD INFORMATION:**

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

MATERIAL SAFETY  
DATA SHEET

MSDS: 3M Brand FOOD SERVICE DEGREASER CONCENTRATE .....  
(Product No. 7, Twist 'n Fill (tm) System)  
FEBRUARY 28, 1997

PAGE: 7 of 7

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8. HEALTH HAZARD DATA

(continued)

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

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SECTION CHANGE DATES

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HEADING

SECTION CHANGED SINCE DECEMBER 18, 1996 ISSUE

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

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