



Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M(TM) INDUSTRIAL DEGREASER CONCENTRATE (Product No. 26, Twist 'n Fill (tm) System)

MANUFACTURER: 3M

DIVISION: Building & Commercial Services Division

ADDRESS: 3M Center
St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

Issue Date: 05/08/2007

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Document Group: 16-4731-2

Product Use:

Intended Use: INDUSTRIAL DEGREASER

SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
POLYETHOXYLATED ALCOHOL - NJTSN #027586004-8002	Trade Secret	15 - 40
2-AMINOISOBUTANOL	124-68-5	15 - 40
WATER	7732-18-5	10 - 30
ETHYLENE GLYCOL ETHYLHEXYL ETHER	1559-35-9	5 - 10
TRIMETHYL OCTADECYL AMMONIUM CHLORIDE	112-03-8	3 - 7
ISOPROPYL ALCOHOL	67-63-0	1 - 5
DIETHYLENE GLYCOL MONO(2-ETHYLHEXYL) ETHER	1559-36-0	1 - 5
D-LIMONENE	5989-27-5	< 1

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Liquid

Odor, Color, Grade: Clear, red concentrate with mild clean and fresh fragrance

General Physical Form: Liquid

Immediate health, physical, and environmental hazards: Combustible liquid and vapor. May cause chemical eye burns.

May cause allergic skin reaction. May cause severe skin irritation.

May cause target organ effects.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Skin Contact:

Severe Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May be absorbed following inhalation and cause target organ effects.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May be absorbed following ingestion and cause target organ effects.

Target Organ Effects:

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

3.3 POTENTIAL ENVIRONMENTAL EFFECTS

A 3M Product Environmental Data Sheet (PED) is available.

A conservative assessment of this product indicates that its use and proper disposal are likely to present a low environmental risk. Potential use and misuse are unlikely to cause components to enter the environment in quantities or by routes that could cause adverse environmental impacts.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

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

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention.

If Swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Flash Point 147 °F [*Test Method:* Closed Cup]

OSHA Flammability Classification: Class IIIA Combustible Liquid

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Combustible liquid and vapor.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with water. Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Keep out of the reach of children. This product is not intended to be used without prior dilution as specified on the product label. Avoid breathing of vapors, mists or spray. Avoid skin contact. Avoid eye contact with vapors, mists, or spray. Do not eat, drink or

smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep container closed when not in use. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. No smoking while handling this material. Grounding or safety shoes with electrostatic dissipating soles (ESD) are not required with TWIST 'n FILL. Avoid contact with oxidizing agents.

7.2 STORAGE

Keep container tightly closed. Store away from heat. Store out of direct sunlight. Store away from acids. Store away from oxidizing agents.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. NOTE: When used as directed and diluted and dispensed with a TWIST 'n FILL(TM) Chemical Dispenser, special ventilation is not required.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact with vapors, mists, or spray. 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.

If the product is not used with the Twist 'n Fill system or if there is an accidental release, the following eye protection is recommended: Indirect Vented Goggles.

8.2.2 Skin Protection

Avoid skin contact. 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.

If the product is not used with the Twist 'n Fill system or if there is an accidental release, select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials. Gloves made from the following material is recommended: Butyl Rubber

8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray. NOTE: When used as directed and diluted and dispensed with a TWIST 'n FILL(TM) Chemical Dispenser, respiratory protection is not required.

If the product is not used with the Twist 'n Fill system or if there is an accidental release, select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
ISOPROPYL ALCOHOL	ACGIH	TWA	200 ppm	Table A4
ISOPROPYL ALCOHOL	ACGIH	STEL	400 ppm	Table A4
ISOPROPYL ALCOHOL	OSHA	TWA	400 ppm	Table Z-1A
ISOPROPYL ALCOHOL	OSHA	STEL	500 ppm	Table Z-1A

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline
OSHA: Occupational Safety and Health Administration
AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form:	Liquid
Odor, Color, Grade:	Clear, red concentrate with mild clean and fresh fragrance
General Physical Form:	Liquid
Flash Point	147 °F [<i>Test Method:</i> Closed Cup]
Boiling point	> 212 °F
Density	Approximately 1 [<i>Ref Std:</i> WATER=1]
Vapor Pressure	Approximately 25 mmHg
Specific Gravity	Approximately 1 [<i>Ref Std:</i> WATER=1]
pH	Approximately 11.2
Solubility in Water	Complete
Volatile Organic Compounds	3 - 7 % [<i>Test Method:</i> calculated per CARB title 2]
Percent volatile	15 - 40
VOC Less H2O & Exempt Solvents	30 - 90 g/l [<i>Test Method:</i> calculated per CARB title 2]
Viscosity	< 100 centipoise [<i>Test Method:</i> ACS METHOD]

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: Strong acids; Strong oxidizing agents; Reducing agents

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

A 3M Product Environmental Data Sheet (PED) is available.

CHEMICAL FATE INFORMATION

A 3M Product Environmental Data Sheet (PED) is available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Incinerate in an industrial or commercial facility. As a disposal alternative, dispose of waste product in a facility permitted to accept chemical waste.

EPA Hazardous Waste Number (RCRA): Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14: TRANSPORT INFORMATION

ID Number	UPC	ID Number	UPC
70-0709-9194-1	00-48011-29664-7	70-0709-9195-8	00-48011-29665-4
70-0709-9251-9	00-48011-29677-7	70-0709-9252-7	00-48011-29678-4

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - No

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
ETHYLENE GLYCOL ETHYLHEXYL ETHER (GLYCOL ETHERS)	1559-35-9	5 - 10
TRIMETHYL OCTADECYL AMMONIUM	112-03-8	3 - 7

CHLORIDE (AMMONIA COMPOUNDS)
DIETHYLENE GLYCOL MONO(2- 1559-36-0 1 - 5
ETHYLHEXYL) ETHER (GLYCOL ETHERS)

STATE REGULATIONS

CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

The components of this product are listed on the Canadian Domestic Substances List.

INTERNATIONAL REGULATIONS

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: OTHER INFORMATION

NFPA Hazard Classification

Health: 3 Flammability: 2 Reactivity: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification

Health: 3 Flammability: 2 Reactivity: 0 Protection: X - See PPE section.

Hazardous Material Identification System (HMIS®) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint and Coatings Association (NPCA).

Reason for Reissue: Changed Physical Properties

Revision Changes:

Section 1: Product use information was modified.

Section 1: Division name was modified.

Copyright was modified.

Section 9: pH information was modified.

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