



Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M™INDUSTRIAL DEGREASER CONCENTRATE

MANUFACTURER: 3M

DIVISION: Commercial Care Division

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

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

Issue Date: 05/21/2002

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Product Use:

Specific Use: 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
2-(2-ETHYLHEXYLOXY)ETHANOL	1559-35-9	5 - 10
TRIMETHYL OCTADECYL AMMONIUM CHLORIDE	112-03-8	3 - 7
ISOPROPYL ALCOHOL	67-63-0	3 - 7
DIETHYLENE GLYCOL MONO(2-ETHYLHEXYL) ETHER	1559-36-0	1 - 5

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Liquid

Odor, Color, Grade: Clear, red concentrate with slight clean and fresh odor

General Physical Form: Liquid

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

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.

Inhalation:

Single exposure, above recommended guidelines, may cause:

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

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

Pulmonary Edema: Signs/symptoms may include chest discomfort, shortness of breath, significant cough with frothy sputum production, bluish colored skin (cyanosis), increased heart rate and possible respiratory failure, and may be fatal.

Ingestion:

Gastrointestinal Effects: Signs/symptoms may include stomach upset, nausea, vomiting and diarrhea.

Chemical (Aspiration) Pneumonitis: Signs/symptoms may include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish colored skin (cyanosis), and may be fatal.

Target Organ Effects:

Single exposure, above recommended guidelines, may cause:

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

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

Pulmonary Edema: Signs/symptoms may include chest discomfort, shortness of breath, significant cough with frothy sputum production, bluish colored skin (cyanosis), increased heart rate, respiratory failure and may be fatal.

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. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES**5.1 FLAMMABLE PROPERTIES**

Autoignition temperature

No Data Available

Flash Point

= 147 °F [*Test Method:* Closed Cup]

Flammable Limits - LEL

No Data Available

Flammable Limits - UEL

No Data Available

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: Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. 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: 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: Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. Contain spill. Dilute in a large excess of water. Carefully, and with stirring, add appropriate dilute acid such as sulfamic acid or vinegar. Confirm neutrality. 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. Clean up residue with water. Place in a metal container approved for use in transportation by appropriate authorities. The container must be lined with polyethylene plastic or contain a plastic drum liner made of polyethylene. 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

This product is not intended to be used without prior dilution as specified on the product label. Avoid eye contact with vapors, mists, or spray. Avoid breathing of vapors, mists or spray. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Avoid contact with oxidizing agents. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment. Keep container closed when not in use. Keep out of the reach of children.

7.2 STORAGE

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact. The following eye protection(s) are recommended: Indirect Vented Goggles.

8.2.2 Skin Protection

Avoid skin contact. 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(s) are recommended: Butyl Rubber.

8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection. Avoid breathing of vapors, mists or spray.

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	400 ppm	
ISOPROPYL ALCOHOL	ACGIH	STEL	500 ppm	
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 slight clean and fresh odor
General Physical Form:	Liquid
Autoignition temperature	<i>No Data Available</i>
Flash Point	= 147 °F [<i>Test Method:</i> Closed Cup]
Flammable Limits - LEL	<i>No Data Available</i>
Flammable Limits - UEL	<i>No Data Available</i>
Boiling point	>=212 °F
Density	0.97 [<i>Ref Std:</i> WATER=1]
Vapor Density	<i>No Data Available</i>
Vapor Pressure	No Data Available
Specific Gravity	Approximately 0.97 [<i>Ref Std:</i> WATER=1]
pH	Approximately 11
Melting point	<i>No Data Available</i>
Solubility in Water	Complete
Evaporation rate	<i>No Data Available</i>
Volatile Organic Compounds	1 - 5 % [<i>Test Method:</i> calculated per CARB title 2]
Percent volatile	<=35 %
VOC Less H₂O & Exempt Solvents	<=40 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

Substance

Carbon monoxide
Carbon dioxide

Condition

During Combustion
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 Product Environmental Data Sheet (PED) is available.

CHEMICAL FATE INFORMATION

Not Determined

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

EPA Hazardous Waste Number (RCRA): D002 (Corrosive)

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

SECTION 14: TRANSPORT INFORMATION

ID Number(s):
70-0709-9750-0

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 - Yes

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>
2-(2-ETHYLHEXYLOXY)ETHANOL (GLYCOL ETHERS)	1559-35-9	5 - 10
TRIMETHYL OCTADECYL AMMONIUM CHLORIDE (AMMONIA COMPOUNDS)	112-03-8	3 - 7
DIETHYLENE GLYCOL MONO(2- ETHYLHEXYL) ETHER (GLYCOL ETHERS)	1559-36-0	1 - 5

This product contains a chemical which requires export notification under TSCA section 12[b]:

<u>Ingredient (Category if applicable)</u>	<u>C.A.S. No</u>	<u>Regulation</u>	<u>Status</u>
ISOPROPYL ALCOHOL	67-63-0	Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals	Applicable

CHEMICAL INVENTORIES

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

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

National Fire Protection Agency Hazard Codes are designed for use by firefighters, sheriffs, or other emergency response teams who are concerned with the hazards of burning or exploding materials. These NFPA codes are not intended to address the hazards of this product other than in a fire situation.

HMIS Hazard Classification

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

HMIS codes are intended for use in everyday workplace settings to provide a rapid indication of the occupational hazards associated with chemicals used in the workplace.

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