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Material Safety Data Sheet

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Prepared by: Corporate Regulatory Services, 3M Canada Company Telephone: (800) 364-3577, Fax: (800) 603-7758, Web Site: www.3M.ca

1 Chemical Product and Company Identification

Tradename:

3M(TM) Industrial Degreaser Concentrate (Product No. 26, Twist 'n Fill(TM) System)

Product ID:

70-0715-9446-2 70-0715-9447-0 XN-1015-8053-0 70-0715-9448-8 70-0715-9449-6

Intended Use of Product:

Hard Surface Cleaner

Division:

ND - Building & Commercial Services Division

2 Hazards Identification

Critical Hazards:

Combustible liquid and vapour.

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

May be absorbed through skin and cause target organ effects.

May be absorbed following inhalation and cause target organ effects.

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May be absorbed following ingestion and cause target organ effects. See Sections 7 and 11 for further information.

3 Composition/Information on Ingredients

Ingredient Name	CAS Number	Percentage
Alcohols, C8-10, ethers with polyethylene-polypropylene glycol monobenzyl ether	68154-99-4	15 - 40
2-AMINOISOBUTANOL	124-68-5	15 - 40
WATER	7732-18-5	10 - 30
2-HEXYL-ETHYLOXYETHANOL	1559-35-9	5 - 10
Quaternary Ammonium Chloride	68610-19-5	5 - 10
ISOPROPYL ALCOHOL	67-63-0	1 - 3
DIETHYLENE GLYCOL MONO(2-ETHYLHEXYL)	1559-36-0	1 - 3
ETHER		
FRAGRANCE	Mixture	0.1 - 1.0
NOTE:		

Fragrance is a Trade Secret material which is not controlled according to WHMIS criteria.

Each percentage is expressed as the ratio of the weight of the ingredient to the weight of the controlled product.

4 First Aid Measures

Instructions for Eye Contact:

Immediately flush eyes with large amounts of water for at least 30 minutes. Get immediate medical attention.

Instructions for Skin Contact:

Remove contaminated clothing and shoes. Wash affected area with soap and water. If signs/symptoms develop, get medical attention. Wash contaminated clothing and clean shoes before reuse.

Instructions for Inhalation:

If signs/symptoms develop, remove person to fresh air. If signs/symptoms persist, get medical attention.

Instructions for Ingestion:

Do not induce vomiting unless instructed to do so by medical personnel. Get medical attention.

5 Fire Fighting Measures

Flash point: 63.9 C CC Lower Explosive Limit (%): Not Available Not Available Upper Explosive Limit (%): Autoignition temperature: Not Available

Suitable Extinguishing Media:

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

Exposure Hazards during Fire:

Closed containers exposed to heat from fire may build pressure and explode.

Combustion Products from Fire:

None known.

Unusual Fire and Explosion Hazards

Combustible liquid and vapour.

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 equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

NFPA: Health NFPA: Fire NFPA: Reactivity 0

NFPA: Unusual Reaction Hazard

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.

6 Accidental Release Measures

Personal Precautions:

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.

Environmental Procedures

Place in a container approved for transportation by appropriate

authorities, but do not seal the container for 48 hours to avoid pressure build-up. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Dispose of collected material as soon as possible.

Methods for cleaning up

Contain spill. 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 using non-sparking tools. Clean up residue with water.

Spill Response:

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill.

7 Handling and Storage

Storage Requirements:

No data available.

Incompatible Materials:

Store away from heat;

Store out of direct sunlight.

Store away from acids;

Store away from oxidizing agents.

Ventilation:

Keep container in well-ventilated area.

Explosion Prevention:

Keep away from heat, sparks, open flame, pilot lights and other sources of ignition.

Use Instructions:

For industrial or professional use only. Avoid contact with oxidizing agents.

8 Exposure Controls/Personal Protection

Personal Protection

Eye Protection:

Do not get in eyes.

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:

full face shield;

Indirect vented goggles;

Hand 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.

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.

The following glove material(s) are recommended:

butyl rubber;

neoprene;

nitrile rubber;

Skin Protection:

Do not get on skin or on clothing.

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.

The following protective clothing material(s) are recommended: Coveralls - Disposable;

Boots - Nitrile

Respiratory Protection:

Do not breathe vapours.

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, an exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure: Full facepiece air-purifying respirator suitable for for ammonia/methylamine. For questions about suitability for a specific application, consult with your respirator manufacturer.

Ingestion (Prevention):

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

Keep out of the reach of children.

Recommended Ventilation:

Use in a well-ventilated area.

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

Ingredient Exposure Data _____

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Alcohols, C8-10, ethers with polyethylene-polypropylene glycol
monobenzyl ether (68154-99-4)
 LD50 (rat, oral)
                                       No data available.
 LC50 (rat, inhalation/4 hours) No data available.
 Exposure Limits
    No data available.
2-AMINOISOBUTANOL (124-68-5)
  Specific Ingredient Data
   No data available.
  LD50 (rat, oral)
                                      2900 mg/kg
  LC50 (rat, inhalation/4 hours)
                                      No data available.
  Exposure Limits
   No data available.
WATER (7732-18-5)
 LD50 (rat, oral)
                                       > 90 \text{ ml/kg}
  LC50 (rat, inhalation/4 hours) No data available.
  Exposure Limits
   No data available.
2-HEXYL-ETHYLOXYETHANOL (1559-35-9)
  Specific Ingredient Data
    No data available.
                                       3080 mg/kg
2120 mg/kg
  LD50 (rat, oral)
 LD50 (dermal, rabbit)
 LC50 (rat, inhalation/4 hours)

No data available.
  Exposure Limits
   No data available.
Quaternary Ammonium Chloride (68610-19-5)
 LD50 (rat, oral) No data available.
LC50 (rat, inhalation/4 hours) No data available.
  Exposure Limits
   No data available.
ISOPROPYL ALCOHOL (67-63-0)
                                      5045 mg/kg
  LD50 (rat, oral)
 LD50 (dermal, rabbit)
 LD50 (dermal, rabbit) 12800 mg/kg
LC50 (rat, inhalation/4 hours) 17000 ppm
  Exposure Limits
    ACGIH: TWA 200 ppm (Table A4)
    ACGIH: STEL 400 ppm (Table A4)
     400 ppm ACGIH: STEL 200 ppm ACGIH: TWA
DIETHYLENE GLYCOL MONO (2-ETHYLHEXYL) ETHER (1559-36-0)
  Specific Ingredient Data
   No data available.
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______ LD50 (rat, oral) 7.46 ml/kg2.52 ml/kg LD50 (dermal, rabbit) LC50 (rat, inhalation/4 hours)

No data available. Exposure Limits No data available. FRAGRANCE (Mixture) Specific Ingredient Data No data available. LD50 (rat, oral) No data available. LC50 (rat, inhalation/4 hours)

No data available.

No data available. Exposure Limits No data available. 9 Physical and Chemical Properties _____ Physical form, Color, Odour: Liquid; Clear; red; fresh scent; Odour Threshold: No data available. 10.5 - 11 :Hq 100.0 C Boiling point/boiling range: Not Available Melting point/melting range: Vapour pressure: 27 mmHg Water Solubility: Not Available Not Available Partition coefficient (K o/w): 0.98 g/cm3 Water=1 Specific gravity: Vapour density: Not Available Volatile organic compounds: 15 - 40 % Estimated Evaporation rate: Not Available 21.9 - 24.2 centipoise Viscosity: Percent Volatile: No data available. 10 Stability and Reactivity ______

Conditions to Avoid: Store away from heat; Store out of direct sunlight. Materials to Avoid: Strong acids; Strong oxidizing agents; Reducing agents; Hazardous Decomposition: Carbon Monoxide; Carbon Dioxide; Stability and Reactivity:

Stable. Hazardous polymerization will not occur.

11 Toxicological Information

Effects from Eye Contact:

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

Effects from Skin Contact:

Severe Skin Irritation: signs/symptoms can 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.

May be absorbed through skin and cause target organ effects.

Effects from 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. Prolonged or repeated exposure may cause:

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

Effects from 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. Sensitization Information:

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

Carcinogenicity:

No data available.

Mutagenicity:

No data available.

Reproductive Effects:

No data available.

Component Based Information:

No data available.

Product Based Information:

No data available.

Other Effects & Information:

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

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12 Ecological Information

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Environmental Data:

Ecotoxicity Data:

Not determined.

Ecofate Data:

Not determined.

13 Disposal Considerations

Product as Sold:

Incinerate in an industrial or commercial facility. Combustion products will include HCI. Facility must be capable of handling halogenated materials. As a disposal alternative, dispose of waste product in a facility permitted to accept chemical waste.

Product Packaging:

No data available.

Special Instructions:

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

14 Transport Information

Transportation of Dangerous Goods

TDG Classification:

Special Information:: Contact 3M for more information. These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M's transportation classifications are based on product formulation, packaging, 3M policies and 3M's understanding of applicable current regulations. 3M does not quarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for Canadian ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

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15 Regulatory Information

B3, D2B

WHMIS Classification:

NOTE:

This product has been classified in accordance with the hazard

Non-Regulated Material

criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Product Certifications:

The product on this MSDS, or all its components, is included on the following countries' chemical inventories, as noted:

DSL - Domestic Substances List (Canada)

EINECS - European Inventory of Existing Commercial Chemical Substances

TSCA - Toxic Substances Control Act (USA)

16 Other Information

Reason for Reissue:

The following Sections and topics have been updated or revised: Added French translation to MSDS

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