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Material Safety Data Sheet  
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1 Product Identification  
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Tradename:

3M BRAND HEAVY DUTY MULTISURFACE CLEANER CONCENTRATE (PRODUCT NO. 2,  
TWIST 'N FILL (TM) SYSTEM)

Product ID:

XN-1015-1337-4 70-0705-2682-0 70-0705-4313-0 70-0705-4903-8  
70-0705-8961-2 70-0707-1407-9 70-0708-3903-3 70-0708-3990-0  
70-0710-0959-4 70-9999-5010-1

Intended Use of Product:

Intended for dilution 1:12 and dispensing with a mechanical  
dispenseral device; useful for cleaning hard and carpeted surfaces  
after proper dilution

Division:

COMMERCIAL CARE DIVISION

Limitations on Use of Product:

Not intended for use outside of dispenser

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2 Composition/Information on Ingredients  
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Ingredient Name	CAS Number	Percentage
1-METHOXY-2-PROPANOL	107-98-2	40 - 70
WATER	7732-18-5	10 - 30
ETHANOLAMINE	141-43-5	10 - 30
HYDROXYALKYL AMINE OXIDES	68478-65-9	7 - 13
ISOPROPYL ALCOHOL	67-63-0	1 - 5
DODECYLBENZENESULFONIC ACID	27176-87-0	1 - 5
2-ETHYL-HEXYLOXYETHANOL	1559-35-9	1 - 5

Ingredient Name	CAS Number	Percentage
2-METHOXY-1-PROPANOL	1589-47-5	0.5 - 1.5

Ingredient Statements

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

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3 Hazards Identification

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Critical Hazards

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 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 may cause: Central Nervous System Depression: signs/symptoms can include headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

Combustible liquid and vapour.

See Sections 7 and 11 for further information.

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4 First Aid Measures

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Instructions for Eye Contact:

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

Instructions for Skin Contact:

Immediately flush skin with large amounts of water for at least 15 minutes in a chemical safety shower while removing contaminated clothing and shoes. Get immediate medical attention. Wash contaminated clothing before reuse.

Instructions for Inhalation:

If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician.

Instructions for Ingestion:

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

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5 Fire Fighting Measures

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Flash point: Approximately 40.6 C TCC  
Lower Explosive Limit (%): Not Available.  
Upper Explosive Limit (%): Not Available.  
Autoignition temperature: Not Available.  
Suitable Extinguishing Media:  
Water spray; Carbon Dioxide; Dry chemical; Foam; Alcohol-type foam  
Exposure Hazards during Fire:  
Closed containers exposed to heat from fire may build pressure and  
explode.  
Combustion Products from Fire:  
None known.  
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.

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#### 6 Accidental Release Measures

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##### Personal Precautions:

Refer to other sections of this MSDS for information regarding  
physical and health hazards, respiratory protection, ventilation,  
and personal protective equipment.

##### Spill Response:

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.

##### Methods for Disposal:

Incinerate in a permitted hazardous waste incinerator.

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#### 7 Handling and Storage

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##### Storage Requirements:

No data available.

##### Incompatible Materials:

Store away from heat.

##### Ventilation:

Keep container in well-ventilated area.

##### Fire Prevention:

NOTE: When used as directed and diluted and dispensed with a TWIST'n  
FILL (tm) Chemical Dispenser, container grounding and low static or  
grounded shoes are not required. Ground containers securely when  
transferring contents. Wear low static or properly grounded shoes.

Explosion Prevention:

Keep away from heat, sparks, open flame, and other sources of ignition. Prevent all sources of ignition. Combustible liquid and vapour.

Use Instructions:

Keep container tightly closed. Not intended for consumer sale or use. This product is not intended to be used without prior dilution as specified on the product label.

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8 Exposure Controls/Personal Protection

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Personal Protection

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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 vented goggles. Wear full-face shield.

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. Wear appropriate gloves when handling this material. A pair of gloves made from the following material(s) are recommended: butyl rubber; neoprene; nitrile rubber;

Skin Protection:

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

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 vapours, mists or spray. Avoid breathing of airborne material. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants: full-face organic vapour respirator;

Ingestion (Prevention):

Wash hands after handling and before eating. Keep out of the reach of children.

Recommended Ventilation:

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 appropriate local exhaust ventilation at transfer points. If exhaust ventilation is not adequate, use appropriate respiratory protection.

Ingredient Exposure Data

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1-METHOXY-2-PROPANOL (107-98-2)  
LD50 (rat, oral): 5660 mg/kg  
LC50 (rat, inhalation/4 hours): 15,000 ppm  
PIN (Product Identification Number): 3092  
Ontario TWAEV: 100 ppm 365 mg/m3  
Ontario STEV: 150 ppm 550 mg/m3  
ACGIH TLV-TWA: 100 ppm 369 mg/m3  
ACGIH TLV-STEL: 150 ppm 553 mg/m3

WATER (7732-18-5)  
LD50 (rat, oral): > 90 ml/kg

ETHANOLAMINE (141-43-5)  
LD50 (rat, oral): 1720 mg/kg  
PIN (Product Identification Number): 2491  
Ontario TWAEV: 3 ppm 7.5 mg/m3  
Ontario STEV: 6 ppm 15 mg/m3  
ACGIH TLV-TWA: 3 ppm 7.5 mg/m3  
ACGIH TLV-STEL: 6 ppm 15 mg/m3

HYDROXYALKYL AMINE OXIDES (68478-65-9)  
Specific Ingredient Data: No data available.

ISOPROPYL ALCOHOL (67-63-0)  
LD50 (rat, oral): 4710 mg/kg  
LC50 (rat, inhalation/4 hours): 17000 ppm  
PIN (Product Identification Number): 1219  
Ontario TWAEV: 400 ppm 980 mg/m3  
Ontario STEV: 500 ppm 1225 mg/m3  
ACGIH TLV-TWA: 400 ppm 985 mg/m3  
ACGIH TLV-STEL: 500 ppm 1230 mg/m3

DODECYLBENZENESULFONIC ACID (27176-87-0)  
LD50 (rat, oral): 650 mg/kg  
Specific Ingredient Data: No data available.

2-ETHYL-HEXYLOXYETHANOL (1559-35-9)  
Specific Ingredient Data: No data available.

2-METHOXY-1-PROPANOL (1589-47-5)  
Specific Ingredient Data: No data available.

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## 9 Physical and Chemical Properties

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Physical form,Color,Odour: Liquid; colourless to light  
amber colour; fresh scent;  
Odour Threshold: No data available.  
pH: Approximately 11.9  
Boiling point/boiling range: Not Available.  
Melting point/melting range: Not applicable  
Vapour pressure: Not Available.  
Water Solubility: Complete  
Partition coefficient (K o/w): No data available.  
Specific gravity: Approximately 0.978 Water=1  
Vapour density: Not Available.  
Volatile organic compounds: Approximately 55 %  
Evaporation rate: Not Available.  
Viscosity: Approximately 10 centipoise

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## 10 Stability and Reactivity

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Conditions to Avoid:  
None known.  
Materials to Avoid:  
Strong oxidizing agents;  
Hazardous Decomposition:  
Carbon monoxide and carbon dioxide; Irritant vapours or gases;  
Stability and Reactivity:  
Stable. Hazardous polymerization will not occur.

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## 11 Toxicological Information

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Effects from 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.  
Effects from Skin Contact:  
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.  
Effects from 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.

Effects from Ingestion:

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

Ingestion may cause: 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.

Sensitization Information:

No data available.

Carcinogenicity:

No data available.

Mutagenicity:

No data available.

Reproductive Effects:

No data available.

Other Effects & 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 Toxicological Information section of this data sheet.

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## 12 Ecological Information

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Ecotoxicity Data:

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

Other Effects and Information:

The use of this product is expected to have no significant environmental impact. All components will eventually degrade in the environment.

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## 13 Disposal Considerations

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Product as Sold:

No data available.

Product Packaging:

No data available.

Special Instructions:

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

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#### 14 Transportation Information

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##### Transportation of Dangerous Goods

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TDG Classification: Regulated Material.  
Proper Shipping Name: FLAMMABLE LIQUIDS, CORROSIVE,  
N.O.S.\*  
Technical Name: (ETHANOLAMINE,  
1-METHOXY-2-PROPANOL)  
Class/Division: 3.3 , 8.0  
UN Number: UN 2924  
Packing Group: III

##### International Dangerous Goods Classification

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IMO Class: No data available.  
ICAO Class: No data available.

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#### 15 Regulatory Information

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WHMIS Classification: B3, D2B, E,

##### NOTE:

This product has been classified in accordance with the hazard 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:  
TSCA - Toxic Substances Control Act (USA)

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#### 16 Other Information

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##### Reason for Reissue:

The following Sections and topics have been updated or revised:  
Added/changed product ids of MSDS

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