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Material Safety Data Sheet
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1 Product Identification

Tradename:
3M(TM) GLASS CLEANER CONCENTRATE (PRODUCT NO. 1, TWIST 'N FILL(TM)
SYSTEM)
Product ID:
XN-1015-5749-6 70-0711-6342-5 70-0711-6368-0 70-0711-6369-8
70-0711-6462-1
Intended Use of Product:
Cleaner;
Division:
ND - Commercial Care Division

2 Composition/Information on Ingredients

Ingredient Name	CAS Number	Percentage
1-PROPOXY-2-PROPANOL	1569-01-3	60 - 90
WATER	7732-18-5	10 - 30
ALKYL ETHOXY CARBOXYLIC ACID	220622-96-8	1 - 5
2-PROPOXY-1-PROPANOL	10215-30-2	0.5 - 1.5
ETHANOLAMINE	141-43-5	0.1 - 1.0

3 Hazards Identification

Critical Hazards:
Combustible liquid and vapour.
Severe Eye Irritation: Signs/symptoms may include significant

redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

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

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

4 First Aid Measures

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:

Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water for at least 15 minutes. Get immediate 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. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

5 Fire Fighting Measures

Flash point: 47.78 C Does not sustain combustion (ASTM D-4206)

Lower Explosive Limit (%): Not available

Upper Explosive Limit (%): Not available

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:

No data available.

Combustion Products from Fire:

Aldehydes; Carbon Monoxide Carbon Dioxide

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.

NFPA: Health	3
NFPA: Fire	2
NFPA: Reactivity	0
NFPA: Unusual Reaction Hazard	none

6 Accidental Release Measures

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:

Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Ventilate the area with fresh air. 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. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with water. Place in a metal container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible.

7 Handling and Storage

Storage Requirements:

No data available.

Incompatible Materials:

Store away from oxidizing agents. Store away from acids. Store away from heat. Store out of direct sunlight.

Ventilation:

Keep container in well-ventilated area.

Explosion Prevention:

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

Use Instructions:

This product is not intended to be used without prior dilution as specified on the product label. Avoid contact with oxidizing agents.

8 Exposure Controls/Personal Protection

Personal Protection

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 with vapours, mists, or spray. The following should be worn alone or in combination, as appropriate, to prevent eye contact: 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.

The following glove material(s) are recommended: butyl rubber; neoprene; fluoroelastomer (Viton);

Skin Protection:

Avoid skin contact.

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. Select one of the following approved respirators based on airborne concentration of contaminants and in accordance with regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges.

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:

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

Ingredient Exposure Data

1-PROPOXY-2-PROPANOL (1569-01-3)

Specific Ingredient Data: No data available.

LD50 (rat, oral):: 2504 mg/kg

LC50 (rat, inhalation/4 hours):: No data available.

Exposure Limits:: No data available.

WATER (7732-18-5)

LD50 (rat, oral):: > 90 ml/kg
LC50 (rat, inhalation/4 hours):: No data available.
Exposure Limits:: No data available.

ALKYL ETHOXY CARBOXYLIC ACID (220622-96-8)

Specific Ingredient Data: No data available.
LD50 (rat, oral):: No data available.
LC50 (rat, inhalation/4 hours):: No data available.
Inventory Certifications:: TSCA - Toxic Substances Control Act (USA)
Exposure Limits:: No data available.

2-PROPOXY-1-PROPANOL (10215-30-2)

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

ETHANOLAMINE (141-43-5)

LD50 (rat, oral):: 1720 mg/kg
LC50 (rat, inhalation/4 hours):: No data available.
PIN (Product Identification Number):: 2491
Inventory Certifications:: AICS - Australian Inventory of Chemical Substances
CICS - Chinese Inventory of Chemical Substances
DSL - Domestic Substances List (Canada)
2054833 EINECS - European Inventory of Existing Commercial Chemical Substances
KE-20493 KECI - Korean Existing Chemicals Inventory
2-301 MITI - Ministry of International Trade and Industry (JAPAN)
PICCS - Philippines Inventory of Commercial Chemical Substances
TSCA - Toxic Substances Control Act (USA)
Exposure Limits:: 3 ppm ACGIH: TWA
7.5 mg/m³ ACGIH: STEL
6 ppm ACGIH: STEL
15 mg/m³ ACGIH: STEL
EU Hazard Symbols and Risk Phrases:: EU - Adaptation 21 (Xi,Xn; R:20-36-37- 38)

9 Physical and Chemical Properties

Physical form,Color,Odour:	Liquid; clear; dark blue colour; apple fragrance;
Odour Threshold:	No data available.

pH:	9.5 - 10.5
Boiling point/boiling range:	Approximately 148.89 C
Melting point/melting range:	Not available
Vapour pressure:	27 psia @ 55 C
Water Solubility:	Complete
Partition coefficient (K o/w):	No data available.
Specific gravity:	Approximately 0.9 Water=1
Vapour density:	Not available
Volatile organic compounds:	60 - 100 % CARB
Evaporation rate:	Not available
Viscosity:	< 50 centipoise
Percent Volatile:	70 - 100 %

10 Stability and Reactivity

Conditions to Avoid:

None known.

Materials to Avoid:

Strong oxidizing agents;

Hazardous Decomposition:

Aldehydes; Carbon Monoxide Carbon Dioxide

Stability and Reactivity:

Stable. Hazardous polymerization will not occur.

11 Toxicological Information

Effects from Eye Contact:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Effects from Skin Contact:

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

Effects from 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.

May be absorbed following inhalation and cause target organ effects.

Effects from Ingestion:

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

Sensitization Information:

No data available.

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:

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.

12 Ecological Information

Environmental Data:

Ecotoxicity Data:

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

Ecofate Data:

Not determined.

13 Disposal Considerations

Product as Sold:

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

Product Packaging:

No data available.

Special Instructions:

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

14 Transportation Information

Transportation of Dangerous Goods

TDG Classification:

Non-Regulated Material

15 Regulatory Information

WHMIS Classification: B3, D2B

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)
- CICS - Chinese Inventory of Chemical Substances

16 Other Information

Reason for Reissue:

MSDS initial issue

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