

20
Concentrate

3M MATERIAL SAFETY DATA SHEET 3M(TM) HEAVY DUTY GLASS CLEANER CONCENTRATE (Product No. 20, Twist 'n Fill(TM) System) 05/29/2003



Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M(TM) HEAVY DUTY GLASS CLEANER CONCENTRATE (Product No. 20, Twist 'n Fill(TM) System)

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: 05/29/2003
Supersedes Date: 05/13/2002

Document Group: 08-2580-2

Product Use:
Specific Use: Heavy duty glass cleaner

SECTION 2: INGREDIENTS

Ingredient	C.A.S. No.	% by Wt.
1-PROPOXY-2-PROPANOL	1569-01-3	60 - 100
ALKYL ETHOXY CARBOXYLIC ACID	220622-96-8	1 - 5
2-PROPOXY-1-PROPANOL	10215-30-2	< 2
ETHANOLAMINE	141-43-5	0.5 - 1.5
DIPROPYLENE GLYCOL N-PROPYL ETHER	29911-27-1	< 1
DIPROPYLENE GLYCOL	25265-71-8	< 1
PROPYLENE GLYCOL	57-55-6	< 1

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Liquid
Odor, Color, Grade: Clear, dark blue-purple color with glycol odor.
General Physical Form: Liquid
Immediate health, physical, and environmental hazards: May cause severe eye irritation. May cause chemical skin burns. May cause target organ effects.

3.2 POTENTIAL HEALTH EFFECTS

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

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Skin Contact:

Corrosive (Skin Burns): Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

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.

Ingestion:

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

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.

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 for at least 15 minutes. Get immediate medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: If signs/symptoms develop, remove person to fresh air. If signs/symptoms persist, 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

Aut ignition temperature	No Data Available
Flash Point	118 °F
Flammable Limits - LEL	No Data Available
Flammable Limits - UEL	No Data Available
OSHA Flammability Classification:	Class II 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

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Special 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.

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: 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. Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. 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.

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 skin contact. 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. Keep out of the reach of children.

7.2 STORAGE

Store away from acids. Store away from oxidizing agents. Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

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.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact. **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. The following eye protection(s) are recommended: Full Face Shield.

8.2.2 Skin 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. 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, Fluoroelastomer (Viton), Neoprene.

8.2.3 Respiratory Protection

3M MATERIAL SAFETY DATA SHEET 3M(TM) HEAVY DUTY GLASS CLEANER CONCENTRATE (Product No. 20, Twist 'n Fill(TM) System) 05/29/2003

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 vapors, mists or spray. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or full face 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 ingest. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

8.3 EXPOSURE GUIDELINES

Ingredient	Authority	Type	Limit	Additional Information
ETHANOLAMINE	ACGIH	TWA	3 ppm	
ETHANOLAMINE	ACGIH	STEL	6 ppm	
ETHANOLAMINE	OSHA	TWA	3 ppm	Table Z-1A
ETHANOLAMINE	OSHA	STEL	6 ppm	Table Z-1A
PROPYLENE GLYCOL	AIHA	TWA - specific form	50 ppm	as vapor and aerosol

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 (WBEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form:	Liquid
Odor, Color, Grade:	Clear, dark blue-purple color with glycol odor.
General Physical Form:	Liquid
Autoignition temperature	No Data Available
Flash Point	118 °F
Flammable Limits - LEL	No Data Available
Flammable Limits - UEL	No Data Available
Boiling point	Approximately 300 °F
Density	Approximately 0.9 g/ml [Ref Std: WATER=1]
Vapor Density	No Data Available
Vapor Pressure	No Data Available
Specific Gravity	Approximately 0.9 [Ref Std: WATER=1]
pH	9.5 - 10.5 [Details: 10% in water]
Melting point	Not Applicable
Solubility in Water	Complete
Evaporation rate	No Data Available
Volatile Organic Compounds	60 - 100 % [Test Method: calculated per CARB title 2]
Percent volatile	60 - 100 %
VOC Less H2O & Exempt Solvents	600 - 1000 g/l [Test Method: calculated per CARB title 2]
Viscosity	< 50 centipoise

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: Strong oxidizing agents; Heat; Sparks and/or flames

Hazardous Polymerization: Hazardous polymerization will not occur.

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SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature	No Data Available
Flash Point	118 °F
Flammable Limits - LEL	No Data Available
Flammable Limits - UEL	No Data Available
OSHA Flammability Classification:	Class II Combustible Liquid

5.2 EXTINGUISHING MEDIA

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7.2 STORAGE

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

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8.2.4 Prevention of Swallowing

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8.3 EXPOSURE GUIDELINES

Ingredient	Authority	Type	Limit	Additional Information
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ETHANOLAMINE	ACGIH	STEL	6 ppm	
ETHANOLAMINE	OSHA	TWA	3 ppm	Table Z-1A
ETHANOLAMINE	OSHA	STEL	6 ppm	Table Z-1A
PROPYLENE GLYCOL	AIHA	TWA - specific form	50 ppm	as vapor and aerosol

SOURCE OF EXPOSURE LIMIT DATA:

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Liquid	
General Physical Form:	Liquid
Autoignition temperature	No Data Available
Flash Point	118 °F
Flammable Limits - LEL	No Data Available
Flammable Limits - UEL	No Data Available
Boiling point	Approximately 300 °F
Density	Approximately 0.9 g/ml [Ref Std: WATER=1]
Vapor Density	No Data Available
Vapor Pressure	No Data Available
Specific Gravity	Approximately 0.9 [Ref Std: WATER=1]
pH	9.5 - 10.5 [Details: 10% in water]
Melting point	Not Applicable
Solubility in Water	Complete
Evaporation rate	No Data Available
Volatile Organic Compounds	60 - 100 % [Test Method: calculated per CARB title 2]
Percent volatile	60 - 100 %
VOC Less H ₂ O & Exempt Solvents	600 - 1000 g/l [Test Method: calculated per CARB title 2]
Viscosity	< 50 centipoise

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: Strong oxidizing agents; Heat; Sparks and/or flames

Hazardous Polymerization: Hazardous polymerization will not occur.