

MATERIAL SAFETY
DATA SHEET

3M

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DIVISION: COMMERCIAL CARE DIVISION

TRADE NAME:

3M Brand BATHROOM CLEANER CONCENTRATE
(Product No. 4, Twist 'n Fill (tm) System)

ID NUMBER/U.P.C.:	XN-1016-5549-3	-	-	-	70-0705-2685-3	00-48011-19154-1
	70-0705-2686-1	00-48011-19155-8	70-0705-4315-5	00-48011-19204-3		
	70-0705-4316-3	00-48011-19205-0	70-0705-4904-6	00-48011-19308-8		
	70-0705-8964-6	00-48011-19967-7	70-0707-1409-5	00-48011-20797-6		

ISSUED: JANUARY 21, 1998
SUPERSEDES: DECEMBER 8, 1997
DOCUMENT: 06-1683-9

1. INGREDIENT	C.A.S. NO.	PERCENT	
1-OCTYL-2-PYRROLIDINONE	2687-94-7	10	- 30
HYDROXYACETIC ACID	79-14-1	10	- 30
WATER	7732-18-5	10	- 30
MALIC ACID	6915-15-7	10	- 30
QUATERNARY AMMONIUM CHLORIDES	68424-95-3	5	- 10
FRAGRANCE	Unknown	1	- 5
ETHYL ALCOHOL	64-17-5	1	- 5

NOTE: IN CASE OF EMERGENCY, THE NUMBERS AT THE TOP OF THIS PAGE PROVIDE 24
HOUR RESPONSE FROM ANY PHONE FOR ALL EMERGENCIES WITH THIS PRODUCT.

2. PHYSICAL DATA

BOILING POINT: N/D
VAPOR PRESSURE: N/D
VAPOR DENSITY: N/D
EVAPORATION RATE: N/D
SOLUBILITY IN WATER: complete
SP. GRAVITY: ca. 1.12 Water = 1
PERCENT VOLATILE: 15-20 %
pH: ca. 1.0
VISCOSITY: < 100 CFS
MELTING POINT: N/A
APPEARANCE AND ODOR: Liquid, green color, slightly pungent odor

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: > 212 F
FLAMMABLE LIMITS - LEL: N/D
FLAMMABLE LIMITS - UEL: N/D

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3. FIRE AND EXPLOSION HAZARD DATA (continued)

AUTOIGNITION TEMPERATURE: ... N/D
EXTINGUISHING MEDIA:
Water spray, Carbon dioxide, Dry chemical, Foam
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:
No unusual fire or explosion hazards are anticipated. See Hazardous
Decomposition section for products of combustion.
NFPA HAZARD CODES: HEALTH: 3 FIRE: 1 REACTIVITY: 0
UNUSUAL REACTION HAZARD: corrosive
OSHA FIRE HAZARD CLASS: Class IIIB Combustible Liquid

4. REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY - MATERIALS TO AVOID:
None known
HAZARDOUS POLYMERIZATION: Will Not Occur
HAZARDOUS DECOMPOSITION PRODUCTS:
Carbon Monoxide and Carbon Dioxide, Oxides of Nitrogen, Irritant
Vapors or Gases.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:

Refer to other sections of this MSDS for information regarding
physical and health hazards, respiratory protection, ventilation, and
personal protective equipment. Ventilate area. Contain spill.
Evacuate unprotected personnel from hazard area. Cover with soda ash
(sodium carbonate) or sodium bicarbonate. Collect spilled material.
Clean up residue with soda ash (sodium carbonate) solution. Place in
a polyethylene-lined metal container. Do not seal for 48 hours.

RECOMMENDED DISPOSAL:

Incinerate in a permitted hazardous waste incinerator in the presence
of a combustible material.

ENVIRONMENTAL DATA:

A Product Environmental Data Sheet (PED) is available.

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

REGULATORY INFORMATION:

Volatile Organic Compounds: < 10 %
VOC Less H₂O & Exempt Solvents: < 10 %

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5. ENVIRONMENTAL INFORMATION (continued)

Since regulations vary, consult applicable regulations or authorities before disposal. In the event of an uncontrolled release of this material, the user should determine if the release qualifies as a reportable quantity. U.S. EPA Hazardous Waste Number = D002 (Corrosive)

TSCA: All components used in the manufacture of this material are in compliance with the US TSCA inventory.

EPCRA HAZARD CLASS:

FIRE HAZARD: No PRESSURE: No REACTIVITY: No ACUTE: Yes CHRONIC: Yes

6. SUGGESTED FIRST AID

EYE CONTACT:

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

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.

INHALATION:

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

IF SWALLOWED:

If swallowed, do NOT induce vomiting. Give victim two glasses of water. Call a physician immediately. Never give anything by mouth to an unconscious person.

7. PRECAUTIONARY INFORMATION

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 full-face shield.

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. Wear appropriate gloves when handling this material. A pair of gloves made from the following material(s) are recommended: butyl rubber, nitrile rubber. Use one or more of the following personal protection items as

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7. PRECAUTIONARY INFORMATION (continued)

necessary to prevent skin contact: apron, coveralls.

VENTILATION PROTECTION:

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. Use with adequate dilution ventilation. If exhaust ventilation is not adequate, use appropriate respiratory protection.

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 vapors, mists or spray. Avoid breathing of airborne material. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: half-mask organic vapor and acid gas respirator, full-face organic vapor and acid gas respirator.

PREVENTION OF ACCIDENTAL INGESTION:

Wash hands after handling and before eating. Do not ingest.

RECOMMENDED STORAGE:

Store in a cool place. Keep container closed when not in use. Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:

Keep container tightly closed.

OTHER PRECAUTIONARY INFORMATION:

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

HMS HAZARD RATINGS: HEALTH: 3 FLAMMABILITY: 1 REACTIVITY: 0
PERSONAL PROTECTION: X (See precautions, section 7.)

INGREDIENTS	EXPOSURE LIMITS		TYPE	AUTH	SKIN*
	VALUE	UNIT			
1-OCTYL-2-PYRROLIDINONE	NONE	NONE	NONE	NONE	NONE
HYDROXYACETIC ACID	10	mg/m ³	TWA	CMRG	
WATER	NONE	NONE	NONE	NONE	NONE
MALIC ACID	NONE	NONE	NONE	NONE	NONE
QUATERNARY AMMONIUM CHLORIDES	NONE	NONE	NONE	NONE	NONE
FRAGRANCE	NONE	NONE	NONE	NONE	NONE
ETHYL ALCOHOL	1000	ppm	TWA	ACGIH	
ETHYL ALCOHOL	1000	ppm	TWA	OSHA	

* SKIN NOTATION: Listed substances indicated with "Y" under SKIN refer to the potential contribution to the overall exposure by the cutaneous route including mucous membranes and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

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7. PRECAUTIONARY INFORMATION (CONTINUED)**SOURCE OF EXPOSURE LIMIT DATA:**

- ACGIH: American Conference of Governmental Industrial Hygienists
- AIHA: American Industrial Hygiene Assoc. Workplace Environmental Exposure Level 0
- OSHA: Occupational Safety and Health Administration
- CMRG: Chemical Manufacture Recommended Guidelines
- NONE: None Established

8. HEALTH HAZARD DATA**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.

SKIN CONTACT:

Skin Burns (chemical corrosivity): signs/symptoms can include redness, swelling, itching, pain, blistering, ulceration, sloughing, and scar formation.

INHALATION:

Single overexposure, above recommended guidelines, may cause:

Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.

Prolonged or repeated exposure may cause:

Irritation (lower respiratory): signs/symptoms can include coughing, congestion, irritation of throat, wheezing and difficulty breathing.

IF SWALLOWED:

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

Irritation of Gastrointestinal Tissues: signs/symptoms can include pain, vomiting, abdominal tenderness, nausea, blood in vomitus, and blood in feces.

OTHER HEALTH HAZARD 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 Health Hazard Data section of this data sheet.

CARCINOGENS: components of this product, if any, known to cause, or suspected of causing, cancer as determined by OSHA, IARC, OR NTP are described in the Health Hazard Data section of this data sheet in accord with the OSHA Hazard Communications Standard, 29 CFR 1910.1200

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SECTION CHANGE DATES

INGREDIENTS	SECTION CHANGED SINCE	DECEMBER 8, 1997 ISSUE

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