

MATERIAL SAFETY  
DATA SHEET**3M**

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DIVISION: HOME AND 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: FEBRUARY 28, 1997

SUPERSEDES: DECEMBER 18, 1996

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

## 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 CPS
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)**

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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

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**4. REACTIVITY DATA**

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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.

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**5. ENVIRONMENTAL INFORMATION**

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## SPILL RESPONSE:

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. In the U.S.A., call (612) 733-1110 or (612) 733-6100 for 24-hour spill assistance. 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.

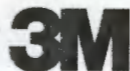
## ENVIRONMENTAL DATA:

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 %.

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**5. ENVIRONMENTAL INFORMATION (continued)**

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VOC Less H2O & Exempt Solvents: < 10 %.

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

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**6. SUGGESTED FIRST AID**

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**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.

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**7. PRECAUTIONARY INFORMATION**

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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 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.

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**7. PRECAUTIONARY INFORMATION (continued)**

Use one or more of the following personal protection items as 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.

HMIS 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	
HYDROXYACETIC ACID .....	10	mg/m <sup>3</sup>	TWA	CMRG	
WATER .....	NONE	NONE	NONE	NONE	
MALIC ACID .....	NONE	NONE	NONE	NONE	
QUATERNARY AMMONIUM CHLORIDES .....	NONE	NONE	NONE	NONE	
FRAGRANCE .....	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 membrane 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)**

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**SOURCE OF EXPOSURE LIMIT DATA:**

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

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**8. HEALTH HAZARD DATA**

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**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**

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**HEADING****SECTION CHANGED SINCE DECEMBER 18, 1996 ISSUE**

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Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

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