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MATERIAL SAFETY DATA SHEET

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2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon. DIVISION: HOME AND COMMERCIAL CARE DIVISION TRADE NAME: 3M Brand BATHROOM CLEANER Ready-to-Use (Product No. 4, Twist 'n Fill (tm) System) ISSUED: FEBRUARY 28, 1997 SUPERSEDES: DECEMBER 6, 1996 DOCUMENT: 06-2132-6 1. INGREDIENT C.A.S. NO. PERCENT 7732-18-5 95 > WATER 1-OCTYL-2-PYRROLIDINONE 2687-94-7 < 1 HYDROXYACETIC ACID 79-14-1 < 1 MALIC ACID 6915-15-7 < 1 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 ca. 212 F BOILING POINT:.... VAPOR PRESSURE:.... N/D VAPOR DENSITY: N/D EVAPORATION RATE: N/D SOLUBILITY IN WATER: complete SP. GRAVITY:.... ca. l Water = l PERCENT VOLATILE: > 95 % pH: ca. 3 **VISCOSITY:** < 100 CPS MELTING POINT..... N/A APPEARANCE AND ODOR: Liquid, Pink liquid; slightly pungent fragrance 3. FIRE AND EXPLOSION HAZARD DATA FLASH POINT: ... > 212 F FLAMMABLE LIMITS - LEL: N/D FLAMMABLE LIMITS - UEL: N/D AUTOIGNITION TEMPERATURE: ... N/D EXTINGUISHING MEDIA: Water spray, Carbon dioxide, Dry chemical, Foam SPECIAL FIRE FIGHTING PROCEDURES: Not applicable UNUSUAL FIRE AND EXPLOSION HAZARDS: No unusual fire or explosion hazards are anticipated. See Hazardous

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3. FIRE AND EXPLOSION HAZARD DATA (continued)

Decomposition section for products of combustion. NFPA HAZARD CODES: HEALTH: 1 FIRE: 1 REACTIVITY: 0 UNUSUAL REACTION HAZARD: none OSHA FIRE HAZARD CLASS: Not applicable

4. REACTIVITY DATA

STABILITY: Stable INCOMPATIBILITY - MATERIALS TO AVOID: None known. HAZARDOUS POLYMERIZATION: Will Not Occur HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide and Carbon Dioxide.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:

Observe precautions from other sections. Ventilate area. Contain spill. Cover with absorbent material. Collect spilled material. Clean up residue with water. Place in a closed container.

RECOMMENDED DISPOSAL:

Discharge spent solutions and small quantities (less than 5 gal.(19 L)) to a wastewater treatment system. Reduce discharge rate if foaming occurs. Incinerate large quantities in an industrial or commercial incinerator.

ENVIRONMENTAL DATA:

A Product Environmental Data Sheet (PED) is available.

See MSDS for product concentrate.

REGULATORY INFORMATION: Volatile Organic Compounds: < 2 %. VOC Less H20 & Exempt Solvents: < 2 %.

Since regulations vary, consult applicable regulations or authorities before disposal. U.S. EPA Hazardous Waste Number = None (Not U.S. EPA Hazardous).

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. Get immediate medical attention.

SKIN CONTACT: Flush skin with large amounts of water. If irritation persists, get

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6. SUGGESTED FIRST AID (continued)

medical attention.

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: Avoid eye contact. Avoid eye contact with vapor, spray, or mist. SKIN PROTECTION:

Avoid prolonged or repeated skin contact.

VENTILATION PROTECTION: Use in a well-ventilated area. Use with adequate dilution ventilation.

RESPIRATORY PROTECTION: Avoid breathing of vapors, mists or spray.

PREVENTION OF ACCIDENTAL INGESTION: Wash hands after handling and before eating.

RECOMMENDED STORAGE: 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: NOTE: The above precautionary information presumes that this ready-touse product has been diluted and dispensed from a TWIST'n FILL (tm) Chemical Dispenser.

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

	EXPOSURE LIMITS					
INGREDIENTS		VALUE	UNIT	TYPE	AUTH	SKIN*
WATER		NONE	NONE	NONE	NONE	

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7. PRECAUTIONARY INFORMATION (continued)

EXPOSURE LIMITS

INGREDIENTS	VALUE	UNIT	TYPE AUTH SKIN*	
1-OCTYL-2-PYRROLIDINONE	NONE	NONE	NONE NONE	
HYDROXYACETIC ACID	10	mg/m3	TWA CMRG	
MALIC ACID	NONE	NÕNE	NONE NONE	

* 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.

SOURCE OF EXPOSURE LIMIT DATA:

- AIHA: American Industrial Hygine Assoc. Workplace Environmental Exposure Level - CMRG: Chemical Manufacture Recommended Guidelines

- NONE: None Established

8. HEALTH HAZARD DATA

EYE CONTACT:

Mild Eye Irritation: signs/symptoms can include redness, swelling, pain, and tearing.

SKIN CONTACT:

Mild Skin Irritation (after prolonged or repeated contact): signs/symptoms can include redness, swelling, and itching.

INHALATION:

Single overexposure, above recommended guidelines, may cause:

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

IF SWALLOWED:

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.

SECTION CHANGE DATES

HEADING SECTION CHANGED SINCE DECEMBER 6, 1996 ISSUE

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

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