

MANUFACTURER'S NAME & MAILING ADDRESS U S Chemical Corporation 316 Hart Street Watertown, Wisconsin 53094 USA		PREPARED BY D. E. Kenas	SIGNATURE <i>David E. Kenas</i> R
EMERGENCY TELEPHONE NO. (24 HOUR SERVICE) Medical Emergency ONLY: 1-800-851-7145 Ext. 075		TITLE Quality Assurance Manager	DATE 1-4-02
PRODUCT INFORMATION TELEPHONE NO. (8 AM TO 5 PM CST, MON - FRI) Product Information: 1-800-558-9566			

101430 **SECTION 2 - IDENTITY OF MATERIAL**

PRODUCT NAME MU-II			
PRODUCT DESCRIPTION Heavy Duty Cleaner		FORMULA Proprietary Blend	CHEMICAL FAMILY N.A.
REGULATED IDENTIFICATION	DOT PROPER SHIPPING NAME CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (CONTAINS POTASSIUM HYDROXIDE)		
	SHIPPING ID NUMBER UN3266	PACKING GROUP II	HAZARD CLASS 8 (CORROSIVE MATERIAL)

**SECTION 3 - PHYSICAL/CHEMICAL CHARACTERISTICS**

BOILING POINT N.A.	SPECIFIC GRAVITY (H <sub>2</sub> O = 1) 1.061	PHYSICAL FORM Liquid	COLOR Red
VAPOR PRESSURE (mm Hg) N.A.	MELTING POINT N.A.	SOLUBILITY IN WATER Complete	SCENT None
VAPOR DENSITY (AIR = 1) N.A.	EVAPORATION RATE (BUTYL ACETATE = 1) N.A.	pH 2500 ppm SOLUTION N.A.	pH CONCENTRATE Greater than 13.0
OTHER Non-Viscous, Red Solution.			

**SECTION 4 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION**

HAZARDOUS COMPONENTS (CHEMICAL NAME; COMMON NAME)	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED	PERCENT WT/WT
Potassium Hydroxide: Caustic Potash CAS Registry Number 1310-58-3	2 mg/m3 Ceiling Limit	2 mg/m3 Ceiling Limit	None	1.0-5.0
Tetrapotassium Pyrophosphate CAS Registry Number 7320-34-5	Not Established	Not Established	Not Established	1.0-5.0

This product contains no other ingredient considered hazardous according to the criteria of 29 CFR 1910.1200, OSHA. However, this product contains chemicals which may be subject to reporting requirements according to the criteria of SARA Title III, 40 CFR, Part 370, Section 311 and Section 312.

**STATE RIGHT TO KNOW INFORMATION**

THIS PRODUCT CONTAINS: WATER/7732-18-5, NONOXYNOL/9016-45-9, TETRAPOTASSIUM PYROPHOSPHATE/7320-34-5, POTASSIUM HYDROXIDE/1310-58-3, SODIUM XYLENESULFONATE/1300-72-7

NFPA RATING: Health-3/Flammability-0/Reactivity-1 See Section 5 for Protective Equipment.  
HMIS RATING: Health-3/Flammability-0/Reactivity-1 See Section 5 for Protective Equipment.

**CARCINOGENICITY:**

This product does not contain any known carcinogens or anticipated carcinogens according to the criteria of the NTP Annual Report on Carcinogens, IARC Monographs, and OSHA 29 CFR 1910, Subpart Z.

(CONTINUED IN SECTIONS 5 TO 8)

PROTECTIVE EQUIPMENT TYPES	EYES Splash-proof safety glasses, safety goggles, and an eye-wash station.
	RESPIRATORY None required with normal use.
	OTHER Wear full-cover protective clothing to prevent repeated or prolonged contact.
VENTILATION	GENERAL MECHANICAL Satisfactory. Maintain adequate ventilation. Keep levels below recommended TLV.
	LOCAL EXHAUST Not ordinarily needed. Avoid inhalation of mists containing this product.
PRECAUTIONS	HANDLING & STORAGE Follow all label directions. Instruct personnel about proper use, hazards, precautions, and first-aid measures. Avoid inhalation, ingestion and contact with skin and eyes.
	Rotate stock regularly. Handle carefully to avoid damaging container. Keep container closed when not in use. Recommended storage temp below 100°F. Do not freeze. Keep out of children's reach.

**SECTION 6 - HEALTH HAZARD DATA**

EFFECTS OF EXPOSURE	INHALATION Corrosive. Inhalation of mist may cause irritation to nose, throat and mucous membranes, pulmonary irritation, pulmonary edema, tissue damage and chemical burns.	
	INGESTION Corrosive. Harmful or fatal if swallowed. May cause nausea, vomiting, and severe tissue damage to digestive tract. Corrosive to mouth, throat, stomach and to other tissues.	
	SKIN & EYES SKIN: Corrosive. Contact may cause severe irritation, dermatitis, and chemical burns. EYES: Corrosive. Causes eye burns. May cause temporary or permanent vision loss and blindness.	
	ACUTE & CHRONIC ACUTE: Corrosive to all body tissues. Harmful skin contact may not cause immediate pain. Permanent eye damage may result without immediate first aid treatment. CHRONIC: None Known.	
ROUTES OF INGESTION-X SKIN ABSORPTION- ENTRY	SKIN-X EYES-X INHALATION-X	TARGET ORGANS Eyes, Skin, Respiratory System.

**SECTION 7 - PHYSICAL HAZARD DATA**

FLAMMABILITY	LEL = N.A. UEL = N.A.	FLASH POINT = N.A.	METHOD USED = N.A.
STABILITY	STABLE	CONDITIONS TO AVOID Avoid mixing with any other cleaning product. Mix only with water. Do not store at high temperatures. Recommended storage temperature <100°F.	HAZARDOUS DECOMPOSITION PRODUCTS Mixing with incompatible materials may produce hydrogen, carbon monoxide, carbon dioxide, and other toxic and irritating fumes.
	UNSTABLE		
HAZARDOUS POLYMERIZATION	MAY OCCUR WILL NOT OCCUR	CONDITIONS TO AVOID N.A.	
INCOMPATIBILITY	MATERIALS TO AVOID Acidic materials, organic chemicals, and various metals (Aluminum, magnesium, zinc, tin, brass or bronze) which can generate flammable hydrogen gas.		

**SECTION 8 - EMERGENCY RESPONSE DATA**

FIRE	EXTINGUISHING MEDIA For fires in area, use appropriate media. For example: Water spray, dry chemical, carbon dioxide, or alcohol foam.
	SPECIAL PROCEDURES Evacuate area of unprotected personnel. Wear protective clothing including a NIOSH-approved self-contained breathing apparatus.
	UNUSUAL HAZARDS Product may react with some metals such as aluminum, zinc, tin, etc., to release flammable hydrogen gas.
FIRST AID MEASURES	INGESTION: Do not induce vomiting. If patient is conscious and can swallow, administer milk or water. SKIN: Remove contaminated clothes, flood with water for 15 minutes. EYES: Flood with lukewarm (not hot) water poured from a large glass 2 or 3 inches from eyes. Remove contacts. Have patient blink as much as possible while flooding the eyes. Continue for 15 minutes. INHALATION: Move victim to fresh air. Give artificial respiration if patient is not breathing. ADMINISTER FIRST AID TREATMENT AS STATED ABOVE, THEN CALL 1-800-851-7145 Ext 075 OR CONTACT PHYSICIAN FOR FURTHER MEDICAL INSTRUCTIONS.
	STEPS TO BE TAKEN Wear proper protective equipment including rubber boots. Stop leak if you can do so without risk. Dike or dam large spills. Ventilate area if needed. Soak up with sand or other non-combustible inert absorbent materials. Flush area with water and follow with normal clean-up procedures. Keep combustibles away! Be careful as spills are slippery.
SPILLS	WASTE DISPOSAL METHOD Comply with all federal, state, and local regulations. Consult state and local authorities for restrictions on disposal of chemical waste. If approved, may be diluted and drained to a municipal sewer or waste treatment plant. Rinse empty container thoroughly with water before discarding. Please recycle empty container whenever possible.

THE DATA IN THIS MATERIAL SAFETY DATA SHEET RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED AND DOES NOT RELATE TO ITS USE IN COMBINATION WITH ANY OTHER MATERIAL OR PROCESS. THE DATA CONTAINED IS BELIEVED TO BE ACCURATE. HOWEVER, SINCE USE CONDITIONS VARY AND ARE OUTSIDE OUR CONTROL, THE MANUFACTURER MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, AND ASSUMES NO LIABILITY FOR FAILURE TO FOLLOW PRODUCT USE DIRECTIONS AND SAFETY PRECAUTIONS.