Material Safety Data Sheet

Quick Identifier: Metro-Flo Alkali

Section 1

Metro-Chem, Inc. Post Office Box 401 24 Pennsylvania Avenue Kearny, NJ 07032 Emergency Phone No. 800-424-9300 Other Information 973-589-2800 Date Prepared: October 8, 1987 Last Revision: August 3, 2004

Section 2 Hazardous Ingredients\identity

HAZARDOUS COMPONENT (CHEMICAL & COMMON NAME): Potassium Hydroxide

OSHA PEL: 2mg/m3 ACGIH TLV: 2mg/m3 OTHER EXPOSURE LIMITS: n/a CAS NO. 1310-58-3

HAZARDOUS COMPONENT (CHEMICAL & COMMON NAME): Sodium Silicate liquid grade 40

OSHA PEL: 2mg/m3 ACGIH TLV: 2mg/m3 OTHER EXPOSURE LIMITS: n/a CAS NO. 1344-09-8

DOT SHIPPING INFORMATON: Corrosive liquid, Basic, Inorganic, N.O.S., (Potassium Hydroxide Solution), 8, UN3266, PG II

Section 3 Physical & Chemical Characteristics

BOILING POINT: 270 F SPECIFIC GRAVITY (H20=1): 1.2 VAPOR PRESSURE (mm Hg): n/a

VAPOR DENSITY (Air=1): n/a MELTING POINT: n/a SOLUBILITY IN WATER: good

REACTIVITY IN WATER: becomes temperature hot

APPEARANCE AND ODOR: clear, odorless liquid

Section 4 Fire and Explosion Hazard Data

FLASH POINT: none non-flammable METHOD USED: n/a

FLAMMABLE LIMITS IN AIR % BY VOLUME: n/a LEL LOWER: n/a UEL UPPER: n/a

AUTO-IGNITION TEMPERATURE: n/a

EXTINGUISHER MEDIA: Use media suitable for surrounding fire. Material itself does not burn or burns with great difficulty.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus and full protective clothing. Thoroughly decontaminate equipment after use.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Use water in flooding quantities as fog; apply water from as far a distance as possible.

Section 5 Physical Hazards (reactivity data)

STABILITY: Stable CONDITIONS TO AVOID: none

INCOMPATIBILITY (MATERIALS TO AVOID): Avoid contact with aluminum, zinc, tin, and leather. Reacts violently with acids with generation of heat.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen

HAZARDOUS POLYMERIZATION: Will Not Occur CONDITIONS TO AVOID: none

Section 6 Health Hazards

- 1. ACUTE (Immediate) TOXICITY: SKIN: Alkali solution exerts a marked corrosive action on those tissues with which it comes in contact, with resulting burns, frequently deep ulceration, and ultimate scarring. Even dilute solutions will cause burns on prolonged contact. Multiple small burns may result from exposure to Alkali mist. Contact with Alkali Solution does not always cause an immediate burning sensation. If there is suspected contact, the skin should be flushed with water immediately. EYES: Contact with eyes very rapidly causes severe damage to the eye. INGESTION: Results in severe damage to mucous membranes and to underlying tissues with which contact is made. Perforation of these tissues may follow; severe and extensive scar formation may occur. Death may occur if penetration to vital areas occurs. INHALATION: Inhalation of alkali mist may cause damage to the upper respiratory tract and lungs. Effects will vary, depending on the severity of the exposure, from mild irritation of the nasal membranes to severe pneumonitis.
- 2. CHRONIC (Delayed Effect): Chronic local exposure to dilute solutions may cause primary dermatitis and area of superficial skin destruction. Similarly, chronic inhalation of Alkali mist may result in varying degrees of irritation of the respiratory tract tissue.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: respiratory conditions CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN:
NATIONAL TOXICOLOGY PROGRAM: NO I.A.R.C. MONOGRAPHS: NO OSHA: NO

EMERGENCY AND FIRST AID PROCEDURES: Routes of Entry

- 1. INHALATION: Remove to fresh air. If required, give mouth-to-mouth resuscitation. Get immediate medical attention.
- EYES: Flush with copious water at least 15 minutes. Get immediate medical attention.
- SKIN: Wash off with copious water. Remove contaminated clothing, and do not reuse until laundered. For severe burns, get medical attention.
- 4. INGESTION: Do not induce vomiting. Feed milk if available, otherwise, large quantity of water. Get immediate medical attention.

Section 7 Precautions and Spill\Leak Procedures

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep container closed. Avoid contact with strong acids to prevent violent or explosive reactions. Do not allow water to get into container because of violent reaction. OTHER PRECAUTIONS: Separate from acids, metals, organic peroxides, and ignitible materials.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: CAUTION! Spill area will be slippery. If the drum has been punctured: Dike area with sand or earth and pump remaining product into a salvage tank. Spill area: Flush spill area with water and neutralize washings with mineral acid.

WASTE DISPOSAL METHODS (Consult federal, state, and local regulations): Carefully dilute with large quantities of water, neutralize with mineral acids, and discharge slowly to sewer if allowed by local, state, and federal regulations. Otherwise, place in a closed container, label, and remove to an approved chemical waste disposal area. People performing this work should wear adequate personal protective equipment and clothing.

Section 8 Special Protection Information\Control Measures

RESPIRATORY PROTECTION (Specify Type): Use of NIOSH approved respiratory equipment is required. VENTILATION: LOCAL EXHAUST: adequate exhaust MECHANICAL, SPECIAL, OTHER: n/a

PROTECTIVE GLOVES: Rubber or chemical resistant required. EYE PROTECTION: Safety goggles, or glasses, or face shield required. OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Chemical resistant shoes and/or apron recommended. WORK/HYGIENIC PRACTICES: Eyewash stations nearby required, and safety showers should be handy.

We believe the information contained herein is true; however, no warranties, expressed or implied, are made or intended herein with respect to such information.