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**FOR CHEMICAL EMERGENCY**  
Involving Shipping and Handling Spills, Leak, Fire, Exposure or Accident  
Call CHEMTREC 1-800-424-9300

Complies with OSHA's Hazard Communication Standard 29 CFR 1910.1200

**Section 1 - Product Identification**

Product Name: Penetrate® Beverage System Cleaner, all sizes

Product ID: 3103X

**Section 2 - Composition/Information on Ingredients****CHEMICAL NAME**

Potassium Hydroxide

Anhydrous Sodium Metasilicate

**CAS REG. #**

1310-58-3

6834-92-0

*Other ingredients are judged to be non-hazardous, their CAS numbers and their exact percent of composition are proprietary to National Chemicals, Inc.***Section 3 - Hazards Identification**

NFPA: Health 3 Fire 0 Reactivity 1

HMIS: Health 3 Fire 0 Reactivity 1

**EMERGENCY OVERVIEW:** DANGER! CORROSIVE. Can cause burns to the respiratory tract, skin, eyes and gastrointestinal tract. Can cause permanent eye damage. May be harmful or fatal if swallowed. Do not get in eyes, on skin, or on clothing. Do not breathe vapor or mist. Wash thoroughly after handling. Mixing with water, acid or incompatible materials may cause splattering and release of heat.**EYE CONTACT:** Can cause severe irritation, corrosion, and damage to eyes**SKIN CONTACT:** Can cause severe irritation and corrosion of tissue**INHALATION:** Prolonged exposure can cause severe irritation, possible burns with pulmonary edema.**INGESTION:** Can cause irritation, corrosion/ulceration, nausea, and vomiting.**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** respiratory system (including asthma and other breathing disorders)**Section 4 - First Aid Measures**

GET MEDICAL ATTENTION IMMEDIATELY.

**EYES:** Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes lifting the upper and lower eyelids intermittently. Washing eyes within several seconds is essential to achieve maximum effectiveness.**SKIN:** Immediately flush contaminated areas with water. Remove contaminated clothing, jewelry, and shoes immediately. Wash contaminated areas with soap and water. Thoroughly clean and dry contaminated clothing and shoes before reuse.**INHALATION:** Remove to fresh air. Give artificial respiration if not breathing. If breathing is difficult, give oxygen.**INGESTION:** Never give anything by mouth to an unconscious or convulsive person. If swallowed, do not induce vomiting. Give large amounts of water. If vomiting occurs spontaneously, keep airway clear. Give more water when vomiting stops.**NOTE TO PHYSICIAN:** The absence of visible signs or symptoms of burns does NOT reliably exclude the presence of actual tissue damage. Probable mucosal damage may contraindicate the use of gastric lavage.**Section 5 - Fire Fighting Measures****FLASH POINT:** Not flammable**FIRE AND EXPLOSION HAZARDS:** Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. May react with chemically reactive metals such as aluminum, zinc, magnesium, copper, etc. to release hydrogen gas which can form explosive mixtures in air.**EXTINGUISHING MEDIA:** Use extinguishing agents appropriate for surrounding fire.**FIRE FIGHTING:** Move container from fire area if it can be done without risk. Cool containers with water. Wear NIOSH approved positive-pressure self-contained breathing apparatus. Avoid contact with skin.**Section 6 - Accidental Release Measures**

Wear appropriate personal protective equipment. Keep unnecessary and unprotected personnel away. Contain spilled material with dikes, sandbags, etc. Flush spill area with plenty of water to dilute before introducing it to the sewers. This material is alkaline and may raise the pH of surface waters with low buffering capacity. Large releases should be reported, if required, to appropriate agencies.

**Section 7 - Handling and Storage****HANDLING:** Avoid breathing vapor or mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. When mixing, slowly add chemical to water. Never add water to chemical.**STORAGE:** Keep container tightly closed and properly labeled. Do not store in aluminum container or use aluminum fittings or transfer lines. Keep separated from incompatible substances (see Section 10 of the MSDS).

## Section 8 - Exposure Controls and Personal Protection

VENTILATION: Provide local exhaust ventilation where vapor or mist may be generated.

EYE PROTECTION: Wear safety glasses with side shields.

SKIN: Use impervious gloves (rubber or neoprene). Wear chemical resistant clothing and rubber boots when potential for contact with the material exists. Always place pants legs over boots. Thoroughly clean and dry contaminated clothing before reuse.

## Section 9 - Physical and Chemical Properties

APPEARANCE:	clear liquid	ODOR:	odorless
FLASH POINT:	not flammable	WATER SOLUBILITY:	soluble
BOILING POINT:	200 – 290°F (102 – 143°C)	FREEZING POINT:	32° F (0° C)
VAPOR PRESSURE:	no data available	VAPOR DENSITY:	no data available

## Section 10 - Stability and Reactivity

STABILITY: Stable

CONDITIONS TO AVOID: Mixing with water, acid or incompatible materials may cause splattering and release of large amounts of heat.

INCOMPATIBLE MATERIALS: acids, flammable liquids, halogenated compounds, prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys

HAZARDOUS DECOMPOSITION: None known

POLYMERIZATION: Will not occur

## Section 11 - Toxicological Information

When in solution, this material will affect all tissues with which it comes in contact. The severity of the tissue damage is a function of concentration, the length of tissue contact time, and local tissue conditions. After exposure there may be a time delay before irritation and other effects occur. This material is a strong irritant and is corrosive to the skin, eyes, and mucous membranes. This material may cause severe burns and permanent damage to any tissue with which it comes into contact.

CARCINOGEN STATUS: OSHA: No NTP: No IARC: No

## Section 12 - Ecological Information

ECOTOXICITY: This material has exhibited moderate toxicity to aquatic organisms.

## Section 13 - Disposal Considerations

Reuse or reprocess if possible. Flush spill with plenty of water before disposal. Dispose in accordance with all applicable regulations.

## Section 14 - Transport Information

FOR CONTAINERS UNDER 1 GALLON: Not classified as hazardous according to Department of Transportation.

### FOR 1 GALLON CONTAINERS AND GREATER

PROPER SHIPPING NAME:	Potassium hydroxide, solution
ID NUMBER:	UN1814
HAZARD CLASS OR DIVISION:	8
PACKING GROUP:	II
LABELING REQUIREMENTS:	8

## Section 15 - Regulations

### CERCLA SECTIONS 102A/103 HAZARDOUS SUBSTANCES (40 CFR 302.4)

COMPONENT CERCLA REPORTABLE QUANTITIES: Potassium hydroxide 1000 lb (final RQ)

EPCRA EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.30): Not regulated

EPCRA SECTIONS 311/312 HAZARD CATEGORIES (40 CFR 370.21): Acute Health Hazard

EPCRA SECTION 313 (40 CFR 372.65): Not regulated

TSCA: All components are listed or exempt

## Section 16 - Other Information

SUPERSEDES DATE: April 15, 2009

*The information and recommendations in this Material Safety Data Sheet are based upon data believed to be correct and does not relate to its use in combination with any other material or process. Since use conditions vary, we assume no liability for failure to follow product use direction and safety precautions. As data, standards and regulations change; NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.*