MATERIAL SAFETY DATA SHEET

SECTION I: PRODUCT IDENTIFICATION

TRADE NAME: NB-97
CHEMICAL NAME: Sulfite/phosphate
CHEMICAL FAMILY: Nutmeg Boiler Water Treatment

SECTION II: HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS</th>
<th>%</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>potassium hydroxide</td>
<td>1310-58-3</td>
<td>15-20</td>
<td>2mg/m3</td>
</tr>
<tr>
<td>Sodium sulfite</td>
<td>7757-83-7</td>
<td>5-10</td>
<td>not est</td>
</tr>
<tr>
<td>sodium metasilicate</td>
<td>6834-92-0</td>
<td>1-5</td>
<td>not est</td>
</tr>
</tbody>
</table>

SECTION III: PHYSICAL DATA

- Boiling point (F): Above 212
- Specific Gravity: 1.27
- Vapor Pressure (mm Hg): Unknown
- Percent Volatile by volume: 69
- Evap. Rate (water=1): unknown
- pH: 14
- pH (1% soln.): 12.2
- Evaporation rate: unknown
- Vapor density (air=1): Same as water
- Density: 10.6 lbs/gal
- Solubility in Water: Miscible
- Appearance and Odor: Clear, dark brown solution with slight odor

SECTION IV: FIRE PROTECTION INFORMATION

- Flash Point: N/A
- Flammable Limits: N/A
- Extinguishing Media: Product is non-flammable as supplied. Use water, foam, carbon dioxide or dry chemical to extinguish fire.
- Special Fire Fighting Procedures: Keep drums that are exposed to fire cool with water. Wear protective clothing and SCBA.
- Exceptional Fire and Explosion Hazards: In water solution, caustic can react with metals, such as aluminum, tin and zinc and generate flammable and explosive hydrogen gas.
- National Fire Protection Association (NFPA) Rating (in fire conditions):
  - Toxicity: 2
  - Fire: 0
  - Reactivity: 0
  - Special: -
- Hazard Rating: 4=extreme 3=high 2=moderate 1=slight 0=insignificant

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SECTION V: HEALTH HAZARD INFORMATION

PRIMARY ROUTE(S) OF ENTRY:

Skin: X  Eye: X  Inhalation: X  Ingestion: X

Acute Effects of Exposure: Corrosive. May cause burns or tissue damage to skin, eyes or mucous membranes. Sulfite sensitive individuals may experience allergic reaction characterized by nausea, diarrhea, itching, swelling, hives, acute asthma attack loss of consciousness or anaphylactic shock on ingestion.

Chronic Effects of Exposure:
Not a known or suspect carcinogen. (Reference to OSHA, NTP, IARC) Repeated exposure may cause primary irritant dermatitis.

Medical Conditions Which May Be Aggravated By Handling This Product: Persons with impaired breathing may be at increased risk if concentrated mists are inhaled. Open wounds, rashes or sores may be irritated.

Emergency and First Aid Procedures:

Skin: Flush with water, then wash thoroughly with soap and water.

Eyes: Flush with water for 15 minutes and seek medical attention.

Ingestion: Drink plenty of water and consult physician immediately. Avoid alcoholic beverages. Do not give anything by mouth to an unconscious person. Do not induce vomiting.

Inhalation: Move victim to fresh air. Seek medical attention if breathing difficulty persists. Apply artificial respiration if necessary.

IN THE EVENT OF A CHEMICAL SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CALL CHEMTREC AT 1-800-424-9300.

For additional non-emergency information call: Safety and Regulatory Dept.
P.O. Box 200
Chagrin Falls, OH 44022
(440) 247-5000

Date: 4/98
SECTION VI: REACTIVITY DATA

Stable: Yes; X  No:  
Hazardous Polymerization: Yes:  No:  X

Conditions to Avoid: Liberates SO2 in presence of strong acids.

Materials to Avoid: Acids, metals such as aluminum, tin, zinc and alloys containing these metals, strong oxidizers. Avoid contact with leather and wool.

Hazardous Decomposition Products: Oxides of carbon, sulfur, or nitrogen

SECTION VII: SPILL OR LEAK PROCEDURES/WASTE DISPOSAL

Spill or Leak Procedures: Contain spill if without risk. Neutralize small spills with a weak acid in a well ventilated area and flush to sanitary sewer if in accordance with local, state and federal requirements. Larger spills should be recovered or absorbed with inert material and containerized for disposal.

Waste Disposal: This product if disposed of as supplied, qualifies as a RCRA hazardous waste (D002). Dispose of in accordance with local, state and federal requirements.

Additional Regulatory Information:

CERCLA: potassium hydroxide/RQ 1000 lbs; NB-97/RQ 6,400 lbs

SARA Title III:

Sec. 313 Toxic Chemical Release - This product does not contain any ingredients (at 1% or greater) on the Toxic Chemical List.

Sec. 302-304 Extremely Hazardous Substances - This product does not contain ingredients on the Extremely Hazardous Substance List.

Sec. 311-312 Inventory Reporting, Hazard Category - Acute

California Proposition 65: This product does not contain ingredients known to the state of California to cause cancer or reproductive toxicity.

Date: 4/98
SECTION VIII: OCCUPATIONAL PROTECTIVE EQUIPMENT

Eye:
Chemical safety glasses or face shield.

Respiratory:
Not required under normal conditions of use.

Skin:
Rubber or impervious gloves.

Local Exhaust:
Recommended in confined spaces. Mechanical exhaust ventilation sufficient to remove air contaminants from operator's area.

Other:
Rubber apron if splashing likely, eye wash and emergency shower equipment.

SECTION IX: PRECAUTIONARY MEASURES

Avoid skin and eye contact. Do not take internally. Keep container closed when not in use. Avoid breathing vapors or fumes. Wash thoroughly after handling and before eating, drinking, or smoking. Keep from freezing.

Refer to the Material Safety Data Sheet for additional information.

SECTION X: TRANSPORTATION INFORMATION

DOT Label:
CORROSIVE

DOT Proper Shipping Name:
CORROSIVE LIQUID, N.O.S. (contains potassium hydroxide)

DOT Hazard Class/I.D. #:
8, UN 1760, II

I.S. Surface Freight Classification:
Compounds, Industrial Water, Treating Liquid

SECTION XI: ADDITIONAL INFORMATION

FDA:
Complies with 21 CFR 173.310

USDA:
Approved for use in boilers producing steam that may contact food, and non-contact cooling systems.

CSA:
All ingredients reported on TSCA Inventory.

Aquatic Toxicity:
Not tested

Date: 4/98

The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of the suitability and completeness of information from all sources to assure proper use and disposal of these materials and the health of employees and customers.