Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

Catalog Number:
3000, F-125, F036100, SF036100

Product Identity:
FEHLING'S ALKALINE SOLUTION (FEHLING SOLUTION B)

Manufacturer's Name:
RICCA CHEMICAL COMPANY LLC

Emergency Contact(24 hr) -- CHEMTREC®
Domestic: 800-424-9300
International: 703-527-3887

CAGE Code: 4TCW6, 0V553, 4XZQ2

Address:
448 West Fork Dr
Arlington, TX 76012

Telephone Number For Information:
817-461-5601

Date Prepared:
9/1/00

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Section 2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Registry #</th>
<th>Concentration</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>9 - 11% (w/v)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Sodium Potassium Tartrate Tetrahydrate</td>
<td>6381-59-5</td>
<td>33 - 36% (w/v)</td>
<td>N/A ppm</td>
<td>Not Available</td>
</tr>
<tr>
<td>(Potassium Sodium Tartrate Tetrahydrate)</td>
<td></td>
<td></td>
<td>N/A mg/m3</td>
<td>Not Available</td>
</tr>
<tr>
<td>Water, Deionized</td>
<td>7732-18-5</td>
<td>Balance</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

Section 3: Hazard Identification

Emergency Overview: CAUTION! Corrosive. May cause burns to all areas of contact. Wash areas of contact with water for at least 15 minutes. Call a physician if irritation develops. If ingested, dilute with water and call a physician. Do not induce vomiting.

Target Organs: eyes, skin, respiratory system.

Eye Contact: May cause irritation and burns.

Inhalation: May cause mild irritation to serious damage of the upper respiratory tract, depending on severity of exposure.

Skin Contact: May cause irritation, redness, and pain.

Ingestion: May cause mild irritation to serious damage of the upper respiratory tract, depending on severity of exposure.

Chronic Effects/Carcinogenicity: Dermatitis may develop from repeated exposures to dilute Sodium Hydroxide Solutions.

IARC - No.
NTP - No.
OSHA - No.
Reproductive Information: Not Applicable.


Section 4: First Aid Measures - In all cases, seek qualified evaluation.

Eye Contact: Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops.

Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.

Skin Contact: Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops.

Ingestion: Dilute with water or milk. Do not induce vomiting. Call a physician if necessary.

Section 5: Fire Fighting Measures

Flash Point: Not Available.
LFL: Not Available.
Method Used: Not Available.
UFL: Not Available.

Extinguishing Media: Use any means suitable for extinguishing surrounding fire.

Fire & Explosion Hazards: Not considered to be a fire or explosion hazard.

Fire Fighting Instructions: Use normal procedures/instructions.

Fire Fighting Equipment: Use protective clothing and breathing equipment appropriate for the surrounding fire.

Section 6: Accidental Release Measures

Collect liquid and dilute with water. Neutralize with dilute acid solutions. Release to drain if local regulations allow. For larger spills, absorb with suitable material (vermiculite, clay, etc.). Collect the solid residue and save for disposal.

Section 7: Handling and Storage

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Do not mix with acids.

Safety Storage Code: Corrosive

Section 8: Exposure Control/Personal Protection

Engineering Controls: No specific controls are needed. Normal room ventilation is adequate.
Respiratory Protection: Normal room ventilation is adequate.
Skin Protection: Chemical resistant gloves.
Eye Protection: Safety glasses or goggles.

Section 9: Physical and Chemical Properties

Appearance: Clear, colorless liquid
Odor: Odorless
Solubility in Water: Infinite
Specific Gravity: Approximately 1.25

pH: > 12
Boiling Point(°C): Approximately 101
Melting Point(°C): Approximately 0
Vapor Pressure: Not Applicable.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage.
Incompatibility: Acids, organic halogen compounds, metals such as aluminum, tin and zinc.
Hazardous Decomposition Products: Potassium and Sodium Oxides, decomposition by reaction with certain metals releases flammable and explosive Hydrogen gas.
Hazardous Polymerization: Will not occur.
Section 11. Toxicological Information
Sodium Hydroxide: Irritation data: skin, rabbit: 500 mg/24H severe; eye, rabbit: 50 g/24H severe. Investigated as a mutagen (Sodium Hydroxide).

Section 12. Ecological Information
Ecotoxicological Information: Sodium Hydroxide has high acute and chronic toxicity to aquatic life. The toxicity is influenced by the hardness and alkalinity of the receiving water. Insufficient data are available to evaluate the short and long term effects to plants, birds and land animals.

Chemical Fate Information: Sodium Hydroxide is not expected to accumulate in the edible tissues of aquatic life that are normally consumed by humans.

Section 13. Disposal Considerations
Neutralize with dilute acid solutions, then wash the resulting solution down the drain with excess water if local regulations allow. If not allowed, containerize for proper disposal with a RCRA approved waste disposal facility. Always dispose of in accordance with local, state, and federal regulations.

Section 14. Transport Information
Part Numbers: 3000-1, 3000-16, 3000-2.5, 3000-32, 3000-5, F-125 500ML, F-125 LT

D.O.T. Shipping Name: Sodium Hydroxide Solution
D.O.T. Hazard Class: 8
U.N. / N.A. Number: UN1824
Packing Group: II
D.O.T. Label: 8

Section 15. Regulatory Information (Not meant to be all inclusive - selected regulation represented)


TSCA Status: All components of this solution are listed on the TSCA Inventory or are mixtures (hydrates) of items listed on the TSCA Inventory.

Sara Title III:
- Section 302 Extremely Hazardous Substances: Not Applicable.
- Section 311/312 Hazardous Catagories: Acute: Yes            Chronic, Fire, Pressure, Reactivity: No
- Section 313 Toxic Chemicals: Not Applicable.

California: None Reported.

Pennsylvania: Sodium Hydroxide is listed as an Environmental Hazard on the state's Hazardous Substances List. Sodium Hydroxide is listed as an Environmental Hazard on the state's Hazardous Substances List.

RCRA Status: Not Applicable.

CERCLA Reportable Quantity: Sodium Hydroxide - 1,000 pounds. Sodium Hydroxide - 1,000 pounds.

WHMIS: E: Corrosive Material.

Section 16. Other Information

NFPA Ratings:

Health: 3 Flammability: 0 Reactivity: 0 Special Notice Key: None

HMS Ratings:

Health: 3 Flammability: 0 Reactivity: 0 Protective Equipment: B (Protective Eyewear, Gloves)
When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.