4. FIRE HAZARDS

4.1 Flash Point: Not pertinent (Dry salt ignites spontaneously in air).

4.2 Flammable Limits in Air: Not pertinent.

4.3 Fire Extinguishing Agents: Small fires: dry chemical (no ammonium salts or urea), carbon dioxide, water spray or foam; large fires: water spray, fog or foam. (Spilled material may ignite if allowed to dry.)

4.4 Fire Extinguishing Agents Not to Be Used: Do not use dry chemicals containing ammonium salts or urea. These compounds may react with the caustic solution to generate toxic ammonia gas.

4.5 Special Hazards of Combustion Products: Contain toxic and corrosive fumes of sodium monoxide (Na$_2$O). Inhalation of mist may be harmful. Contact causes burns to eyes and skin. Caustic if swallowed. Treatment of Exposure: CALL FOR MEDICAL AID.

1. CORRECTIVE RESPONSE ACTIONS

Stop discharge
Dilute and disperse

2. CHEMICAL DESIGNATIONS

<table>
<thead>
<tr>
<th>2.1 CG Compatibility Group</th>
<th>5: Caustics</th>
</tr>
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<tbody>
<tr>
<td>2.2 Formula</td>
<td>Not pertinent</td>
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<tr>
<td>2.3 IMO/UN Designation</td>
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<tr>
<td>2.4 DOT ID No.</td>
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<tr>
<td>2.5 CAS Registry No.</td>
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<tr>
<td>2.6 NAERG Guide No.</td>
<td>Not listed</td>
</tr>
<tr>
<td>2.7 Standard Industrial Trade Classification</td>
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</table>

3. HEALTH HAZARDS

3.1 Personal Protective Equipment: Wear self-contained (positive pressure if available) breathing apparatus and full protective clothing.

3.2 Symptoms Following Exposure: Inhalation of mist may be harmful. Contact causes burns to eyes and skin. Caustic if swallowed.

3.3 Treatment of Exposure: PALMATION! Move victim to fresh air. If breathing is difficult, give oxygen. EYES OR SKIN: Flush with running water for at least 15 min.; hold eyelids open if necessary. Remove and isolate contaminated clothing and shoes at the site. INGESTION: If victim is conscious, have victim drink water or milk. DO NOT INDUCE VOMITING. If victim is unconscious or having convulsions, do nothing except keep victim warm.

3.4 TLV-TWA: Not listed
3.5 TLV-STEL: Not listed
3.6 TLV-Ceiling: Not listed
3.7 Toxicity by Ingestion: Currently not available
3.8 Toxicity by Inhalation: Currently not available
3.9 Chronic Toxicity: Currently not available
3.10 Vapor (Gas) Irritant Characteristics: Currently not available
3.11 Liquid or Solid Characteristics: Currently not available
3.12 Odor Threshold: Currently not available
3.13 IDLH Value: Not listed
3.14 OSHA PEL-TWA: Not listed
3.15 OSHA PEL-STEL: Not listed
3.16 OSHA PEL-Ceiling: Not listed
3.17 EPA AEGL: Not listed

4. FIRE HAZARDS

4.1 Flash Point: Not pertinent (Dry salt ignites spontaneously in air).

4.2 Flammable Limits in Air: Not pertinent.

4.3 Fire Extinguishing Agents: Small fires: dry chemical (no ammonium salts or urea), carbon dioxide, water spray or foam; large fires: water spray, fog or foam. (Spilled material may ignite if allowed to dry.)

4.4 Fire Extinguishing Agents Not to Be Used: Do not use dry chemicals containing ammonium salts or urea. These compounds may react with the caustic solution to generate toxic ammonia gas.

4.5 Special Hazards of Combustion Products: Contain toxic and corrosive fumes of sodium monoxide (Na$_2$O).

4.6 Behavior in Fire: Noncombustible; however, if heated to dryness, resulting solids may ignite spontaneously in air to yield toxic and corrosive fumes containing sodium monoxide (Na$_2$O).

4.7 Auto Ignition Temperature: Not pertinent; however, spilled material may ignite in air after the water evaporates.

4.8 Electrical Hazards: Not pertinent.

4.9 Burning Rate: Not pertinent.

4.10 Adiabatic Flame Temperature: Currently not available.

4.11 Stoichiometric Air to Fuel Ratio: Not pertinent.

4.12 Flame Temperature: Currently not available.


5. CHEMICAL REACTIVITY

5.1 Reactivity with Water: Not pertinent.

5.2 Reactivity with Common Materials: Contact not permitted with copper, copper alloys, zinc or aluminum.

5.3 Stability During Transport: Stable.

5.4 Neutralizing Agents for Acids and Caustics: Currently not available.

5.5 Polymerization: Not pertinent.

5.6 Inhibitor of Polymerization: Not pertinent.

6. WATER POLLUTION

6.1 Aquatic Toxicity: Currently not available.

6.2 Waterfront Toxicity: Currently not available.

6.3 Biological Oxygen Demand (BOD): Currently not available.

6.4 Food Chain Concentration Potential: Currently not available.

6.5 GESAMP Hazard Profile: Not listed.

NOTES

7. SHIPPING INFORMATION

7.1 Grades of Purity: Not pertinent.

7.2 Storage Temperature: Ambient.

7.3 Inert Atmosphere: No requirement.

7.4 Venting: Open.

7.5 IMO Pollution Category: A.

7.6 Ship Type: 3.

7.7 Barge Hull Type: 3.

8. HAZARD CLASSIFICATIONS

8.1 49 CFR Category: Not listed.

8.2 49 CFR Class: Not pertinent.

8.3 49 CFR Package Group: Not listed.

8.4 Marine Pollutant: No.

8.5 NFPA Hazard Classification: Not listed.

8.6 EPA Reportable Quantity: Not listed.

8.7 EPA Pollution Category: Not listed.

8.8 RCRA Waste Number: Not listed.

8.9 EPA FWPCA List: Not listed.

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Physical State at 15°C and 1 atm: Liquid.

9.2 Molecular Weight: Not pertinent.

9.3 Boiling Point at 1 atm: Currently not available.

9.4 Freezing Point: Currently not available.

9.5 Critical Temperature: Not pertinent.

9.6 Critical Pressure: Not pertinent.

9.7 Specific Gravity: Currently not available.

9.8 Liquid Surface Tension: Currently not available.

9.9 Liquid Water Interfacial Tension: Not pertinent.

9.10 Vapor (Gas) Specific Gravity: Not pertinent.

9.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent.


9.13 Heat of Combustion: Currently not available.


9.15 Heat of Solution: Not pertinent.

9.16 Heat of Polymerization: Not pertinent.

9.17 Heat of Fusion: Currently not available.

9.18 Limiting Value: Not pertinent.

9.19 Reid Vapor Pressure: Not pertinent.

JUNE 1999
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<th>Temperature (degrees F)</th>
<th>Pounds per cubic foot</th>
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