

SODIUM THIOCYANATE SOLUTION (56% OR LESS)

STS

| CAUTIONARY RESPONSE INFORMATION | | | | 4. FIRE HAZARDS | 7. SHIPPING INFORMATION |
|--|---|----------------------|----------|--|---|
| Common Synonyms Rhodanate Sodium rhodanide Sodium sulfocyanate | Liquid | Clear to pale yellow | Odorless | <p>4.1 Flash Point: Not flammable.</p> <p>4.2 Flammability Limits in Air: Not pertinent.</p> <p>4.3 Fire Extinguishing Agents: Use extinguishing agents appropriate for the surrounding fire.</p> <p>4.4 Fire Extinguishing Agents Not to Be Used: Not pertinent.</p> <p>4.5 Special Hazards of Combustion Products: Irritating oxides of sulfur and nitrogen may form in fire.</p> <p>4.6 Behavior in Fire: Currently not available</p> <p>4.7 Auto Ignition Temperature: Not pertinent.</p> <p>4.8 Electrical Hazards: Not pertinent.</p> <p>4.9 Burning Rate: Not pertinent.</p> <p>4.10 Adiabatic Flame Temperature: Not pertinent.</p> <p>4.11 Stoichiometric Air to Fuel Ratio: Not pertinent.</p> <p>4.12 Flame Temperature: Not pertinent.</p> <p>4.13 Combustion Molar Ratio (Reactant to Product): Not pertinent.</p> <p>4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed</p> | <p>7.1 Grades of Purity: 50-60% solutions in water.</p> <p>7.2 Storage Temperature: Ambient.</p> <p>7.3 Inert Atmosphere: No requirement.</p> <p>7.4 Venting: Open.</p> <p>7.5 IMO Pollution Category: (B)</p> <p>7.6 Ship Type: 3</p> <p>7.7 Barge Hull Type: 3</p> |
| Fire | Not flammable. POISONOUS GASES MAY BE PRODUCED WHEN HEATED. Use extinguishing agents appropriate for the surrounding fire. | | | | 8. HAZARD CLASSIFICATIONS |
| Exposure | <p>CALL FOR MEDICAL AID.</p> <p>VAPOR Irritating to eyes, nose and throat. If in eyes, hold eyelids open and flush with plenty of water. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen.</p> <p>LIQUID Irritating to skin and eyes. If swallowed will cause nausea, vomiting or loss of consciousness. Remove contaminated clothing and shoes. Flush affected areas with plenty of water. IF IN EYES, hold eyelids open and flush with plenty of water. IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk. IF SWALLOWED and victim is UNCONSCIOUS OR HAVING CONVULSIONS, do nothing except keep victim warm.</p> | | | <p>8.1 49 CFR Category: Not listed.</p> <p>8.2 49 CFR Class: Not pertinent.</p> <p>8.3 49 CFR Package Group: Not listed.</p> <p>8.4 Marine Pollutant: No</p> <p>8.5 NFPA Hazard Classification: Not listed</p> <p>8.6 EPA Reportable Quantity: Not listed.</p> <p>8.7 EPA Pollution Category: Not listed.</p> <p>8.8 RCRA Waste Number: Not listed</p> <p>8.9 EPA FWPCA List: Not listed</p> | 9. PHYSICAL & CHEMICAL PROPERTIES |
| Water Pollution | Dangerous to aquatic life in high concentrations. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes. | | | <p>9.1 Physical State at 15° C and 1 atm: Liquid</p> <p>9.2 Molecular Weight: 81.08</p> <p>9.3 Boiling Point at 1 atm: Currently not available</p> <p>9.4 Freezing Point: Currently not available</p> <p>9.5 Critical Temperature: Currently not available</p> <p>9.6 Critical Pressure: Currently not available</p> <p>9.7 Specific Gravity: Currently not available</p> <p>9.8 Liquid Surface Tension: Currently not available</p> <p>9.9 Liquid Water Interfacial Tension: Currently not available</p> <p>9.10 Vapor (Gas) Specific Gravity: Currently not available</p> <p>9.11 Ratio of Specific Heats of Vapor (Gas): Currently not available</p> <p>9.12 Latent Heat of Vaporization: Currently not available</p> <p>9.13 Heat of Combustion: Currently not available</p> <p>9.14 Heat of Decomposition: Currently not available</p> <p>9.15 Heat of Solution: Currently not available</p> <p>9.16 Heat of Polymerization: Not pertinent.</p> <p>9.17 Heat of Fusion: Currently not available</p> <p>9.18 Limiting Value: Currently not available</p> <p>9.19 Reid Vapor Pressure: Currently not available</p> | 5. CHEMICAL REACTIVITY |
| 1. CORRECTIVE RESPONSE ACTIONS Dilute and disperse Stop discharge | 2. CHEMICAL DESIGNATIONS 2.1 CG Compatibility Group: 0; Unassigned cargoes 2.2 Formula: NaSCN 2.3 IMO/UN Designation: Not listed. 2.4 DOT ID No.: Not listed. 2.5 CAS Registry No.: 540-72-7 2.6 NAERG Guide No.: Not listed 2.7 Standard Industrial Trade Classification: 52382 | | | <p>6. WATER POLLUTION</p> | NOTES |
| 3. HEALTH HAZARDS | | | | | |
| <p>3.1 Personal Protective Equipment: Rubber or plastic gloves; splash-proof goggles; rubber or plastic apron.</p> <p>3.2 Symptoms Following Exposure: Intensity of effects will vary with concentration of the solution. Inhalation of vapor causes irritation of nose and throat. Ingestion of large doses causes vomiting, extreme cerebral excitement, convulsions, and death in 10-48 hrs.; chronic poisoning can cause flu-like symptoms, skin rashes, weakness, fatigue, vertigo, nausea, vomiting, diarrhea, confusion. Contact with eyes causes irritation. Prolonged contact with skin may produce various skin eruptions, dizziness, cramps, nausea, and mild to severe disturbance of the nervous system.</p> <p>3.3 Treatment of Exposure: Call for medical aid. INHALATION: Move to fresh air. INGESTION: Consult physician; hemodialysis is recommended as the treatment of choice. EYES or SKIN: Flush with water for 15 min.</p> <p>3.4 TLV-TWA: Not listed.</p> <p>3.5 TLV-STEL: Not listed.</p> <p>3.6 TLV-Ceiling: Not listed.</p> <p>3.7 Toxicity by Ingestion: Grade 3; LD₅₀ = 764 mg/kg (rat)</p> <p>3.8 Toxicity by Inhalation: Currently not available.</p> <p>3.9 Chronic Toxicity: Causes birth defects in chick embryos.</p> <p>3.10 Vapor (Gas) Irritant Characteristics: Currently not available</p> <p>3.11 Liquor or Solid Characteristics: Currently not available</p> <p>3.12 Odor Threshold: Currently not available</p> <p>3.13IDLH Value: Not listed.</p> <p>3.14 OSHA PEL-TWA: Not listed.</p> <p>3.15 OSHA PEL-STEL: Not listed.</p> <p>3.16 OSHA PEL-Ceiling: Not listed.</p> <p>3.17 EPA AEGL: Not listed</p> | | | | | |

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| 9.20 SATURATED LIQUID DENSITY | | 9.21 LIQUID HEAT CAPACITY | | 9.22 LIQUID THERMAL CONDUCTIVITY | | 9.23 LIQUID VISCOSITY | |
|----------------------------------|-----------------------|------------------------------|-------------------------------------|-------------------------------------|---|----------------------------|-------------------------------|
| Temperature (degrees F) | Pounds per cubic foot | Temperature (degrees F) | British thermal unit per pound-F | Temperature (degrees F) | British thermal unit inch per hour-square foot-F | Temperature (degrees F) | Centipoise |
| CURRENTLY NOT AVAILABLE | | | CURRENTLY NOT AVAILABLE | | CURRENTLY NOT AVAILABLE | | CURRENTLY NOT AVAILABLE |

| 9.24 SOLUBILITY IN WATER | | 9.25 SATURATED VAPOR PRESSURE | | 9.26 SATURATED VAPOR DENSITY | | 9.27 IDEAL GAS HEAT CAPACITY | |
|-------------------------------|-----------------------------------|----------------------------------|-------------------------------|---------------------------------|-------------------------------|---------------------------------|-------------------------------------|
| Temperature (degrees F) | Pounds per 100 pounds of water | Temperature (degrees F) | Pounds per square inch | Temperature (degrees F) | Pounds per cubic foot | Temperature (degrees F) | British thermal unit per pound-F |
| CURRENTLY NOT AVAILABLE | | | CURRENTLY NOT AVAILABLE | | CURRENTLY NOT AVAILABLE | | CURRENTLY NOT AVAILABLE |