

Safety Data Sheet

OSHA's Hazard Communication Standard, 29 CFR 1910.1200

Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that. Consult the standard for specific requirements.

Section 1 – Product and Company Information

| | | | |
|-------------------------|--|--|----------------|
| Product name: | Manganese Reagent | | |
| Product number: | 486606-R | Telephone numbers: | |
| Recommended use: | To test for manganese in water samples | Emergency Telephone (Poison Control): | 1-800-222-1222 |
| Restricted use: | | | |
| Mfg. name: | Industrial Test Systems, Inc. | Manufacturer: | 803-329-9712 |
| Mfg address: | 1875 Langston St. Rock Hill, SC | | |

Section 2 – Hazard Identification

| | | |
|---------------------------|---|---|
| Hazard (s): |   | Hazard, Corrosive, Irritant. Causes burns |
| Required labeling: | NA | |

Section 3 – Composition/Information on Ingredients *(list only ingredients classified as health hazards)*

| Reagent | CAS | % | Hazard |
|----------------------------|-----------|------|-------------------------|
| Hydrochloric acid | 7647-01-0 | 35 | Corrosive, causes burns |
| 1-(2pyridylazo)-2-naphthol | 85-85-8 | <0.1 | Not hazardous |
| | | | |
| | | | |
| | | | |

Section 4 – First-aid measures

| Contact area | First-aid |
|---------------------------|---|
| Eyes | Flush with copious amounts of water for at least 5 minutes. Call doctor immediately |
| Skin | Rinse with copious amounts of water for at least 5 minutes. Call doctor |
| Ingestion | Rinse mouth with water. Do not induce vomiting, call a doctor or Poison Control |
| Inhalation | Evacuate to fresh air. If breathing is difficult, give oxygen. Call doctor |
| Most likely effect | Skin and eye irritation, burns. Respiratory distress in susceptible individuals |

Material Safety Data Sheet

OSHA's Hazard Communication Standard, 29 CFR 1910.1200

Section 5 – Fire-fighting Measures

| | |
|--|--|
| Extinguishing media: | Use that which is used for the surrounding fire. |
| Explosion Hazard: | None found |
| Flash point: | NA |
| Special fire fighting procedures: | Firefighters should wear full protective clothing and self-contained breathing apparatus |

Section 6 – Accidental Release Measures

| |
|--|
| <i>Containment Technique:</i> This material may release or contaminate the environment. Use non-reactive sorbent material to absorb the spilled liquid. |
| <i>Clean-up Technique:</i> Cover the spilled material with an alkali salts such as soda ash or sodium bicarbonate. Adjust the pH of the solution between 6 and 9 using soda ash or sodium bicarbonate. Dispose of material in government approved hazardous waste facility. Use soap solution to decontaminate the spilled area. |

Section 7 – Handling and Storage

| |
|---|
| Use standard hygienic practices (no eating, drinking, or smoking) around the product. Wash hands after use. Avoid heating, evaporation, strong bases and oxidizers, and metals. Keep container tightly closed when not in use. Keep away from children and pets |
|---|

Section 8 – Exposure Controls/Personal Protection

| | |
|---|---|
| OSHA Permissible limits: | NA |
| Engineering controls: | NA |
| Personal Protective Equipment (PPE): | Use PPE appropriate for the surroundings |
| Other: | Use gloves to prevent contact irritation. Use eye protection to prevent droplets from entering the eye. |

Section 9 – Physical and chemical properties

| | | | | | |
|---|-----------------|-------------------------------------|------------------|-----------------------------------|---------|
| Appearance: | Dark red liquid | Melting/freezing point: | NA | Decomposition temperature: | No data |
| Upper/Lower flammability limits: | No data | Solubility: | Soluble in water | Viscosity: | NA |
| Odor: | Acidic odor | Initial Boiling point/Range: | 105°C (221°F) | | |
| Vapor Pressure: | NA | Flash point: | No data | | |
| Odor threshold: | NA | Evaporation rate: | 0.64 | | |
| | NA | Flammability: | Not flammable | | |
| pH: | <5 | Partition coefficient: | NA | | |
| Relative | NA | Auto-ignition | No data | | |

Material Safety Data Sheet

OSHA's Hazard Communication Standard, 29 CFR 1910.1200

| | | | | | |
|----------|--|--------------|--|--|--|
| Density: | | temperature: | | | |
|----------|--|--------------|--|--|--|

Section 10 – Stability and Reactivity

Product is stable. Hazardous polymerization may occur. Avoid evaporation, heating, and metals. May release flammable hydrogen gas when contacted with metals. Heating to decomposition releases toxic and/or corrosive fumes of arsenic compounds. Reacts violently in contact with strong bases and oxidizers

Section 11 – Toxicological information

| |
|---|
| <i>Product Toxicological Data:</i> |
| LD50: |
| LC50: None reported |
| Dermal Toxicity Data: None reported |
| Mutation Data: None reported |
| Reproductive Effects Data: None reported |
| Ingredient Toxicological Data: Hydrochloric Acid: Oral rat LD50 = 900 mg/kg; Inhalation rat LC50 = 3124 ppm/1H; |

Section 12 - Ecological information

| |
|--------------------|
| Data not available |
|--------------------|

Section 13 – disposal considerations

| |
|---|
| Dispose of the liquid per local, state, and federal regulations |
|---|

Section 14 – Transport considerations

| |
|----|
| NA |
|----|

Section 15 – Regulatory information

| |
|--|
| <i>Special Instructions (for accidental release):</i> The solution contains a component, which regulated in US as a hazardous air and water pollutant. This product is regulated as RCRA hazardous waste in the U.S. |
| <i>304 EHS RQ (40 CFR 355):</i> Sodium Arsenite – RQ 1 lbs |
| D.O.T. Emergency response guide number: 157 |

Material Safety Data Sheet

OSHA's Hazard Communication Standard, 29 CFR 1910.1200

Section 16 – Other information

| | |
|----------------------|----------------|
| Preparer: | H. Ray |
| Date prepared: | August 3, 2016 |
| Revision: | 1 |
| Supersedes revision: | NA |