Material Safety Data Sheet

Section 1: Company and Product Information

Product Identification
Name: Ferroin Indicator Solution
Code No: R-1020

WET International, Inc.
135 E. St. Charles Rd., Ste. G
Carol Stream, IL 60188
Tel: 630-221-0790

Section 2: Composition/Information on Ingredients

Hazardous Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>%</th>
<th>PEL</th>
<th>TLV</th>
<th>SARA Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,10-Phenanthroline monohydrate</td>
<td>5144-89-8</td>
<td>&lt;5</td>
<td>None</td>
<td>None</td>
<td>No</td>
</tr>
<tr>
<td>Ferrous sulfate heptahydrate</td>
<td>7782-63-0</td>
<td>&lt;1</td>
<td>1 mg/m3 (Fe)</td>
<td>NIA</td>
<td>No</td>
</tr>
</tbody>
</table>

Non-Hazardous Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>&gt;95</td>
</tr>
</tbody>
</table>

Section 3: Physical and Chemical/Reactivity Properties

Appearance: Red liquid
Stability: X Stable __ Unstable
Odor: Slight characteristic
Boiling Point: N/A
pH: <6
Melting Point: N/A
Solubility in Water: Miscible
Vapor Pressure: NIA
Conditions to Avoid: Extreme temperatures
Hazardous Decomposition Products: 1,10-Phenanthroline liberate hazardous fumes in contact with flames

Section 4: Fire and Explosion Data:

Flash Point: N/A
Flammable Limits: LEL: N/A UEL: N/A
Extinguishing Media: Dry chemicals, CO2 or water spray
Special Fire Fighting Procedures: Firefighters must wear SCBA
Unusual Fire or Explosion Hazards: See hazardous decomposition products
HMIS Hazard: Health: 1 Flammability: 0 Reactivity: 0 Scale: 4=Extreme, 3=High, 2=Moderate, 1=Slight, 0=Least

Section 5: Health Hazard Data

Toxicity:
Acute: Irritant to eyes, No other medical information is available
Chronic: 1,10-Phenanthroline is reported a mutagen in mice at 5uMol/L

Primary Route of Entry: _Inhalation X Ingestion X Skin Carcinogenicity X None _OSHA _NFT _IARC

Target Organs: Eyes, skin. Cellular DNA mutation reported for 1,10-Phenanthroline in mice
Over Exposure: See chronic toxicity

Section 6: Emergency First Aid Procedures:

Eye Contact: Flush with flooding amounts of water. Gently lift the eyelids to rinse. Call for professional medical help
Ingestion: Contact the poison control center or call 911. Never give anything by mouth to an unconscious or convulsing person.
Inhalation: Remove exposed person to fresh air and support breathing as needed
Skin Contact: Flush with flooding amounts of water for at least 15 minutes. Remove contaminated clothing
Others: After first aid, get appropriate in-plant, paramedic or community medical support.

Section 7: Accidental Release Measures:

Spill/Leak Procedures: Notify safety personnel, isolate and ventilate the area, deny entry. Shut off ignition sources. Clean up personnel should protect against vapors inhalation and skin/eye contact
Small Spills: Take up with earth, sand, vermiculite or other absorbent non-combustible material and place in suitable containers
Large Spills: Containment – Dike far ahead of liquid, semi-solid or solid spills. Do not release into the sewer waterways
Regulatory Requirements - Follow applicable OSHA regulations (29 CFR 1910.120) Contact local authorities

Section 8: Handling and Storage Measures:

Handling Precautions: Use gloves, laboratory coats or aprons. Safety glasses should be worn at all times
Ventilation: Use and storage under proper ventilated areas. Enclosed areas might lead to accumulation of vapors. Mechanical ventilation is optimum
Storage Requirements: Store in cool, dry, well ventilated areas. Avoid excessive heat
Others: Good working hygiene practices should be observed for personal protection

Disclaimer: The above information is believed to be correct but it does not claim to be all-inclusive and should be used only as guide. Judgements as to the suitability of the information herein for the purchaser’s purposes are necessarily the purchaser’s responsibility.

Revision Date: July 2001