MSDS for (2-Mercapto-5-methyl-1,3,4-thiadiazole)

**** MATERIAL SAFETY DATA SHEET ****

Section 1 - Chemical Product and Company Identification

MSDS Name 2-Mercapto-5-methyl-1,3,4-thiadiazole
Catalog Numbers 107325
Synonyms 5-Methyl-1,3,4-thiadiazole-2-thiol
Company Identification J&K SCIENTIFIC LTD.
18AEF, Building-D, Majestic Garden 6 Bei-Si-Huan-Zhong
Road Beijing China 100029
For information, call North America: (435)-753-1901
China: (86 10) 82848833
For emergencies, call North America: (800) 424-9300
China: (86 532) 3889090; (86 532) 3889191

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>%</th>
<th>EINECS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>29490-19-5</td>
<td>2-Mercapto-5-methyl-1,3,4-thiadiazole</td>
<td>99%</td>
<td>249-667-1</td>
</tr>
</tbody>
</table>

Haz Symbols Xi

Risk Phrases 36/37/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Irritating to eyes, respiratory system and skin.

POTENTIAL HEALTH EFFECTS

Eye Causes eye irritation.

Skin May be harmful if absorbed through skin. Causes skin irritation.

Ingestion May be harmful if swallowed.

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

Chronic
MSDS for (2-Mercapto-5-methyl-1,3,4-thiadiazole)

**** MATERIAL SAFETY DATA SHEET ****

Section 4 - First aid Measures

Eyes Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin Wash off with soap and plenty of water. Consult a physician.

Ingestion Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Inhalation If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

Notes to Physician

Section 5 - Fire Fighting Measures

General Information Wear self contained breathing apparatus for fire fighting if necessary.

Extinguishing Media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Section 6 - Accidental Release Measures

General Information Use proper personal protective equipment as indicated in section 8.

Spills/Leaks Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

Section 7 - Handling and Storage

Handling Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls Not available.

PERSONAL PROTECTIVE EQUIPMENT
**MSDS for (2-Mercapto-5-methyl-1,3,4-thiadiazole)**

**** MATERIAL SAFETY DATA SHEET ****

**Eyes**
Chemical safety goggles.

**Skin**
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**Clothing**
Wear appropriate protective clothing to prevent skin exposure.

**Respirators**
Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Section 9 - Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Powder</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Color</strong></td>
<td>White</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Vapor Pressure</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Freezing/Melting Point</strong></td>
<td>188-189°C</td>
</tr>
<tr>
<td><strong>Boiling Point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Autoignition Temperature</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Flash Point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Explosion Limits, lower</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Explosion Limits, upper</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Decomposition Temperature</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Solubility in water</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Specific Gravity/Density</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Molecular Formula</strong></td>
<td>C3H4N2S2</td>
</tr>
<tr>
<td><strong>Molecular Weight</strong></td>
<td>132.21</td>
</tr>
</tbody>
</table>

**Section 10 - Stability and Reactivity**

<table>
<thead>
<tr>
<th><strong>Chemical Stability</strong></th>
<th>Stable under recommended storage conditions.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conditions to Avoid</strong></td>
<td>Incompatible materials.</td>
</tr>
<tr>
<td><strong>Incompatibilities with Other Materials</strong></td>
<td>Strong oxidizing agents.</td>
</tr>
<tr>
<td><strong>Hazardous Decomposition Products</strong></td>
<td>Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (Nox), Sulphur oxides.</td>
</tr>
<tr>
<td><strong>Hazardous Polymerization</strong></td>
<td>Will not occur.</td>
</tr>
</tbody>
</table>


Section 11 - Toxicological Information

RTECS#: CAS#29490-19-5: None listed.
LD50/LC50: Not available.
Carcinogenicity: 2-Mercapto-5-methyl-1,3,4-thiadiazole- Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Section 12 - Ecological Information

Not available.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>IATA</th>
<th>IMO</th>
<th>RID/ADR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
</tr>
</tbody>
</table>

Section 15 - Regulatory Information

European/International Regulations

Hazard Symbols: Xi
Risk Phrases:
R 36/37/38: Irritating to eyes, respiratory system and skin.
Safety Phrases:
S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 37/39: Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection)
CAS#29490-19-5:3.
MSDS for (2-Mercapto-5-methyl-1,3,4-thiadiazole)

**** MATERIAL SAFETY DATA SHEET ****

Section 16 - Additional Information

MSDS Creation Date 2010-1-27
Revision #1 Date Original

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