**SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**MSDS Name:** Cobalt (II) Nitrate Hexahydrate

**Catalog Numbers:**
- CAS: 279973, 279973-1, C378-500, C378-500, C378500, 2799731

**Synonyms:**
- Nitric Acid Cobalt Salt Hexahydrate

**Company Identification:**
- Fisher Scientific
- 1 Regent Lane
- Fairlawn, NJ 07410

**For information, call:**
- 201-796-7100

**Emergency Number:**
- 201-796-7100

**For CHEMTREC assistance, call:**
- 800-424-9300

**For International CHEMTREC assistance, call:**
- 703-527-3687

**SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>%</th>
<th>RINECS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>10026-22-9</td>
<td>COBALT (II) NITRATE HEXAHYDRATE</td>
<td>100</td>
<td>unlisted</td>
</tr>
</tbody>
</table>

**Risk Phrases:**
- R22, R43, R44, R53

**Hazard Symbols:**
- T, X, S

**SECTION 3 - HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

**Appearance:** red

**Danger:** Strong oxidizer. Contact with other materials may cause a fire. May cause allergic respiratory reaction. May cause skin irritation. May cause skin sensitization, an allergic reaction, and/or dermatitis. May cause respiratory tract irritation. May cause blood abnormalities. May cause eye and skin irritation. May cause cardiovascular disturbances. May cause respiratory tract irritation. May cause eye and skin irritation. May cause cardiovascular disturbances.

**Target Organs:** Heart, respiratory system, red blood cells.

**Potential Health Effects**

**Eye:**
- Causes eye irritation. Prolonged or repeated contact may cause irritation and/or dermatis. May cause skin sensitization, an allergic reaction, and/or dermatitis. May cause eye irritation. May cause eye and skin irritation. May cause cardiovascular disturbances.

**Ingestion:**
- Causes gastrointestinal irritation with nausea, vomiting, and diarrhea. May cause swelling. Excessive ingestion may increase red blood cells and decrease blood pressure. It may cause increased symptoms of ingestion or death. Causes gastroesophageal reflux disease. Causes gastrointestinal irritation with nausea, vomiting, and diarrhea. May cause cardiac arrest or death. May cause allergic reactions.

**Inhalation:**

**Chronic:**
- Repeated exposure may cause allergic respiratory reaction (asthma).

**SECTION 4 - FIRST AID MEASURES**

**Eye:**
- Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

**Ingestion:**
- Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cups of milk or water.

**Inhalation:**
- Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**Notes to Physician:**
- Administration of Calcium Disodium EDTA may be useful in acute poisoning with its use at the discretion of qualified medical personnel.

**SECTION 5 - FIRE FIGHTING MEASURES**

**General Information:**
- In any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH approved or equivalent, and full protective gear. Use a Class C powder, CO2, or dry chemical extinguisher. May be extinguished with water.

**Extinguishing Media:**
- Use a Class C powder, CO2, or dry chemical extinguisher. May be extinguished with water.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**General Information:**
- Use personal protective equipment as indicated in Section 8.

**Spills/Leaks:**
- Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Personal Protective Equipment section. Provide ventilation.

**SECTION 7 - HANDLING AND STORAGE**

**Handling:**
- Wash hands before eating. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid contact with clothing and other combustible materials.

**Storage:**
- Do not store near combustible materials. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

**SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

**Engineering Controls:**
- Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>COBALT (II) NITRATE HEXAHYDRATE</td>
<td>elemental, as Co: 0.02 mg/m3 TWA (listed under ** no name **). as Co: 0.05 mg/m3 TWA (listed under ** no name **).</td>
<td>as Co: 0.05 mg/m3 TWA (listed under ** no name **). as Co: 0.05 mg/m3 IDLH (listed under ** no name **).</td>
<td>0.2 mg/m3 TWA (listed under ** no name **).</td>
</tr>
</tbody>
</table>

**Personal Protective Equipment**

**Eyes:**
- Wear appropriate protective eyeglasses or chemical splash goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Always use a new or European Standard EN149 approved respirator when necessary.

**Skin:**
- Wear appropriate protective clothing to prevent skin exposure.

**Respiratory:**
- Wear appropriate protective clothing to prevent skin exposure.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State:** Solid

**Appearance:**
- Colorless

**Water Solubility:**
- Not available.

**Vapor Pressure:**
- Negligible.

**Vapor Density:**
- Not available.

**Evaporation Rate:**
- Not available.

**Vapor Pressure:**
- Not available.

**Boiling Point:**
- 75-85°C

**Autoignition Temperature:**
- Not applicable.

**Flash Point:**
- (est.) Health: 2; Flammability: 0; Reactivity: 1

**Decomposition Temperature:**
- 74 deg C
liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, however arising, even if the company has been advised of the possibility of such damages.