Material Safety Data Sheet
Potassium Thiocyanate, 0.1 N Solution

ACC# 88045

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Potassium Thiocyanate, 0.1 N Solution  
**Catalog Numbers:** M-077, M077, MCC-030332  
**Synonyms:** Potassium isothiocyanate; potassium thiocyanide; potassium rhodanate; potassium rhodacyanate.  
**Company Identification:**  
Fisher Scientific  
1 Reagent Lane  
Fair Lawn, 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: 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>&gt;99 %</td>
<td>231-791-2</td>
</tr>
<tr>
<td>333-20-0</td>
<td>Potassium Thiocyanate</td>
<td>&lt;1.0 %</td>
<td>206-370-1</td>
</tr>
</tbody>
</table>

**Hazard Symbols:** XN  
**Risk Phrases:** 21/22 32

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: clear, colorless liquid. **Caution!** May cause irritation.  
**Target Organs:** Heart, brain.

**Potential Health Effects**  
**Eye:** May cause eye irritation.  
**Skin:** May cause skin irritation.  
**Ingestion:** May cause irritation of the digestive tract.  
**Inhalation:** May cause respiratory tract irritation.  
**Chronic:** No information found.

Section 4 - First Aid Measures
Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid. Flush skin with plenty of soap and water.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Antidote: No specific antidote exists.

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Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire.

Flash Point: Not applicable.

Autoignition Temperature: Not applicable.

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: Not published.

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Section 6 - Accidental Release Measures

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

Spills/Leaks: Sweep up, then place into a suitable container for disposal.

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Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with skin and eyes.

Storage: Keep from contact with oxidizing materials.

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Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible 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>Water</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
<tr>
<td>Potassium Thiocyanate</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>
OSHA Vacated PELs: Water: No OSHA Vacated PELs are listed for this chemical. Potassium Thiocyanate: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to minimize contact with skin.
Respirators: Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: clear, colorless
Odor: none reported
pH: Not available.
Vapor Pressure: Not available.
Vapor Density: Not available.
Evaporation Rate: Not available.
Viscosity: Not available.
Boiling Point: Not available.
Freezing/Melting Point: Not available.
Decomposition Temperature: Not available.
Solubility: Not available.
Specific Gravity/Density: Not available.
Molecular Formula: KCNS
Molecular Weight: Not available.

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, light.
Incompatibilities with Other Materials: Strong oxidizing agents, light and strong acids.
Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, oxides of sulfur, carbon dioxide, nitrogen.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: 
CAS# 7732-18-5: ZC0110000
CAS# 333-20-0: XL1925000
LD50/LC50:
CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg;
CAS# 333-20-0:
Oral, mouse: LD50 = 590 mg/kg;
Oral, mouse: LD50 = 594 mg/kg;
Oral, rat: LD50 = 854 mg/kg;

**Carcinogenicity:**
CAS# 7732-18-5: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. CAS# 333-20-0: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Epidemiology:** No data available.

**Teratogenicity:** No data available.

**Reproductive Effects:** No data available.

**Neurotoxicity:** No data available.

**Mutagenicity:** No data available.

**Other Studies:** No data available.

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**Section 12 - Ecological Information**

No information available.

**Section 13 - Disposal Considerations**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

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**Section 14 - Transport Information**

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<th></th>
<th>US DOT</th>
<th>IATA</th>
<th>RID/ADR</th>
<th>IMO</th>
<th>Canada TDG</th>
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<tbody>
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<td><strong>Shipping Name:</strong></td>
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<tr>
<td><strong>Hazard Class:</strong></td>
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<td><strong>UN Number:</strong></td>
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<tr>
<td><strong>Packing Group:</strong></td>
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**Section 15 - Regulatory Information**

**US FEDERAL**

**TSCA**
CAS# 7732-18-5 is listed on the TSCA inventory.
CAS# 333-20-0 is listed on the TSCA inventory.
Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.

Section 12b
None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.

SARA

CERCLA Hazardous Substances and corresponding RQs
None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.

SARA Codes
CAS # 333-20-0: acute.

Section 313
No chemicals are reportable under Section 313.

Clean Air Act:
This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.

STATE
CAS# 7732-18-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.
CAS# 333-20-0 is not present on state lists from CA, PA, MN, MA, FL, or NJ.
California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations
Europea Labeling in Accordance with EC Directives

Hazard Symbols:
XN

Risk Phrases:
R 21/22 Harmful in contact with skin and if swallowed.
R 32 Contact with acids liberates very toxic gas.

Safety Phrases:
S 13 Keep away from food, drink and animal feeding stuffs.
S 2 Keep out of reach of children.

WGK (Water Danger/Protection)
CAS# 7732-18-5: No information available.
CAS# 333-20-0: No information available.

Canada - DSL/NDSL
CAS# 7732-18-5 is listed on Canada's DSL List.
CAS# 333-20-0 is listed on Canada's DSL List.

Canada - WHMIS
WHMIS: Not available.

**Canadian Ingredient Disclosure List**
CAS# 333-20-0 (listed as Cyanides, inorganic salts) is listed on the Canadian Ingredient Disclosure List.

**Exposure Limits**
CAS# 333-20-0 (listed as cyanide anion): OEL-ARAB Republic of Egypt: TW A 5 mg/m³; Skin OEL-AUSTRALIA: TWA 5 mg/m³; Skin OEL-AUSTRIA: TWA 5 mg/m³; Skin OEL-CZECHOSLOVAKIA: TWA 3 mg/m³; STEL 10 mg/m³ JAN9 OEL-DENMARK: TWA 5 mg/m³; Skin OEL-FINLAND: TWA 5 mg/m³; STEL 10 mg/m³ OEL-FRANCE: TWA 5 mg/m³; Skin OEL-GERMANY: TWA 5 mg/m³; Skin OEL-HUNGARY: TWA 0.3 mg/m³; STEL 0.6 mg/m³; Skin OEL-INDIA: TWA 4 mg/m³; Skin OEL-THE NETHERLANDS: TWA 5 mg/m³; Skin OEL-POLAND: TWA 0.3 mg/m³; Skin OEL-SWEDEN: STEL 5 mg/m³; Skin OEL-SWITZERLAND: TWA 5 mg/m³; STEL 10 mg/m³; Skin OEL-THAILAND: TWA 5 mg/m³; Skin OEL-UNITED KINGDOM: TWA 5 mg/m³; Skin

### Section 16 - Additional Information

**MSDS Creation Date:** 12/12/1997  
**Revision #2 Date:** 3/18/2003

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.