SECTION 1: Identification

1.1. Identification
Product form : Substance
Substance name : Potassium Thiocyanate
CAS-No. : 333-20-0
Product code : LC20120
Formula : KSCN

1.2. Recommended use and restrictions on use
Use of the substance/mixture : For laboratory and manufacturing use only.
Recommended use : Laboratory chemicals
Restrictions on use : Not for food, drug or household use

1.3. Supplier
LabChem Inc
Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court
Zelienople, PA 16063 - USA
T 412-826-5230 - F 724-473-0647
info@labchem.com · www.labchem.com

1.4. Emergency telephone number
Emergency number : CHEMTREC: 1-800-424-9300 or 011-703-527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture
GHS-US classification
Acute toxicity (oral) : H302 - Harmful if swallowed
Category 4
Skin corrosion/irritation : H315 - Causes skin irritation
Category 2
Serious eye damage/eye irritation : H319 - Causes serious eye irritation
Category 2A
Hazardous to the aquatic environment - Acute
Hazard Category 3

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements
GHS-US labeling

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : H302 - Harmful if swallowed
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H402 - Harmful to aquatic life

Precautionary statements (GHS-US) : P264 - Wash exposed skin thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, eye protection.
P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P330 - If swallowed, rinse mouth
P332+P313 - If skin irritation occurs: Get medical advice/attention.
**Potassium Thiocyanate**  
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**2.3. Other hazards which do not result in classification**

Other hazards not contributing to the classification: None under normal conditions.

**2.4. Unknown acute toxicity (GHS US)**

Not applicable

**SECTION 3: Composition/Information on ingredients**

**3.1. Substances**

Substance type: Mono-constituent

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Thiocyanate (Main constituent)</td>
<td>(CAS-No.) 333-20-0</td>
<td>100</td>
<td>Acute Tox. 4 (Oral), H302</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Irrit. 2, H315</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Irrit. 2A, H319</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Acute 3, H402</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements: see section 16

**3.2. Mixtures**

Not applicable

**SECTION 4: First-aid measures**

**4.1. Description of first aid measures**

First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER or doctor/physician if you feel unwell.

**4.2. Most important symptoms and effects (acute and delayed)**

Symptoms/effects after skin contact: Causes skin irritation.

Symptoms/effects after eye contact: Causes serious eye irritation.

Symptoms/effects after ingestion: Swallowing a small quantity of this material will result in serious health hazard.

**4.3. Immediate medical attention and special treatment, if necessary**

Obtain medical assistance.

**SECTION 5: Fire-fighting measures**

**5.1. Suitable (and unsuitable) extinguishing media**


Unsuitable extinguishing media: Do not use a heavy water stream.

**5.2. Specific hazards arising from the chemical**

No additional information available

**5.3. Special protective equipment and precautions for fire-fighters**

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

**6.1.1. For non-emergency personnel**

Protective equipment: Safety glasses. Gloves.

Emergency procedures: Evacuate unnecessary personnel.
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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash exposed skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from incompatible materials. Keep container closed when not in use. Air sensitive. Light sensitive. Protect from moisture.


Incompatible materials : Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Potassium Thiocyanate (333-20-0)

<table>
<thead>
<tr>
<th>IDLH</th>
<th>US IDLH (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25 mg/m³</td>
</tr>
</tbody>
</table>

8.2. Appropriate engineering controls

Appropriate engineering controls : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Gloves. Safety glasses.

Hand protection:

Wear protective gloves.

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Respiratory protection not required in normal conditions
Other information:
Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>White solid</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>pH solution</td>
<td>5 (5.3 - 8.7) %</td>
</tr>
<tr>
<td>Melting point</td>
<td>170 - 179 °C</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Non flammable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.886</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>97.18 g/mol</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>500 °C</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Unstable on exposure to air. Unstable on exposure to light. Unstable on exposure to moisture.

10.3. Possibility of hazardous reactions

Contact with acids liberates very toxic gas.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Air contact. Moisture.

10.5. Incompatible materials


10.6. Hazardous decomposition products


SECTION 11: Toxicological information

11.1. Information on toxicological effects
**Potassium Thiocyanate**  
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Likely routes of exposure: Skin and eye contact; Inhalation  
Acute toxicity: Oral: Harmful if swallowed.

<table>
<thead>
<tr>
<th>Potassium Thiocyanate (333-20-0)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>854 mg/kg</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>854 mg/kg body weight</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes skin irritation.  
Serious eye damage/irritation: Causes serious eye irritation.  
Respiratory or skin sensitization: Not classified  
Germ cell mutagenicity: Not classified  
Carcinogenicity: Not classified  
Reproductive toxicity: Not classified  
Specific target organ toxicity – single exposure: Not classified  
Specific target organ toxicity – repeated exposure: Not classified  
Aspiration hazard: Not classified  

Potential Adverse human health effects and symptoms: Based on available data, the classification criteria are not met. Harmful if swallowed.  
Symptoms/effects after skin contact: Causes skin irritation.  
Symptoms/effects after eye contact: Causes serious eye irritation.  
Symptoms/effects after ingestion: Swallowing a small quantity of this material will result in serious health hazard.

**SECTION 12: Ecological information**

12.1. Toxicity  
Ecology - water: Harmful to aquatic life.

<table>
<thead>
<tr>
<th>Potassium Thiocyanate (333-20-0)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>&gt; 100 mg/l</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>11 mg/l</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability  
Potassium Thiocyanate (333-20-0)  
Persistence and degradability: Not established.

12.3. Bioaccumulative potential  
Potassium Thiocyanate (333-20-0)  
Bioaccumulative potential: Not established.

12.4. Mobility in soil  
No additional information available

12.5. Other adverse effects  
Other information: Avoid release to the environment.

**SECTION 13: Disposal considerations**

13.1. Disposal methods  
Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to comply with local, state and federal regulations.  
Ecology - waste materials: Avoid release to the environment.

**SECTION 14: Transport information**

Department of Transportation (DOT)  
In accordance with DOT  
Not regulated
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SECTION 15: Regulatory information

15.1. US Federal regulations

Potassium Thiocyanate (333-20-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
SARA Section 311/312 Hazard Classes Immediate (acute) health hazard

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA
Potassium Thiocyanate (333-20-0)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations
No additional information available

National regulations
Potassium Thiocyanate (333-20-0)
Not listed on the Canadian IDL (Ingredient Disclosure List)

15.3. US State regulations
California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Revision date : 02/14/2018
Other information : None.

Full text of H-phrases: see section 16:

<table>
<thead>
<tr>
<th>H302</th>
<th>Harmful if swallowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H402</td>
<td>Harmful to aquatic life</td>
</tr>
</tbody>
</table>

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 0 - Materials that will not burn under typical dire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.

Hazard Rating
Health : 2 Moderate Hazard - Temporary or minor injury may occur
Flammability : 0 Minimal Hazard - Materials that will not burn
Physical : 1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

Personal protection : E
E - Safety glasses, Gloves, Dust respirator

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