

**MATERIAL SAFETY DATA SHEET****Product Name:** Potassium thiocyanate**CAS No.:** 333-20-0**Version:** 0**1. Identification**

**Product Code** : 90225, 90519  
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**2. Composition/Information on Ingredients**

<b>Ingredient</b>	<b>CAS No</b>	<b>Percent</b>
POTASSIUM THIOCYANATE	333-20-0	90- 100%

**3. Hazards Identification****Hazard classification****Health hazards**

Acute toxicity (Oral) : Category 4  
Acute toxicity (Dermal) : Category 4  
Acute toxicity (Inhalation - dust and mist) : Category 4  
Serious eye damage/eye irritation : Category 2

**Environmental hazards**

Chronic hazards to the aquatic environment : Category 3

**Labels elements****Hazard symbol**

**Signal word** : Warning.  
**Hazard statement** : Harmful if swallowed.  
Harmful in contact with skin.  
Harmful if inhaled.  
Causes serious eye irritation.  
Harmful to aquatic life with long lasting effects.

**Precautionary statement**

**Prevention** : Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-

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- Response** : ventilated area. Avoid release to the environment.  
: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/physician if you feel unwell. Take off contaminated clothing and wash it before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: 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.
- Storage:** : Store in a well-ventilated place. Keep container tightly closed. Store locked up.
- Disposal** : Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
- Other hazards which do not result in GHS classification** : None.

**4. First Aid Measures**

- General information** : Get medical advice/attention if you feel unwell. If medical advice is needed, have product container or label at hand. Show this safety data sheet to the doctor in attendance.
- Ingestion** : Rinse mouth. Call a physician or poison control center immediately. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
- Inhalation** : Move to fresh air. Apply artificial respiration if victim is not breathing. If breathing is difficult, give oxygen. Get medical attention.
- Skin contact** : Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician or poison control center immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.
- Eye contact** : Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention immediately.
- Most important symptoms/effects, acute and delayed** : Harmful if inhaled. Harmful if swallowed. Causes serious eye irritation.
- Indication of immediate medical attention and special treatment needed** : Treat symptomatically. Symptoms may be delayed.

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- General fire hazards** : In case of fire and/or explosion do not breathe fumes.
- Suitable (and unsuitable) extinguishing media**
- Suitable extinguishing media** : Use fire-extinguishing media appropriate for surrounding materials.
- Unsuitable extinguishing media** : None known.
- Specific hazards arising from the chemical** : During fire, gases hazardous to health may be formed.
- Special protective equipment and precautions for firefighters**
- Special fire fighting procedures** : Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.
- Special protective equipment for fire-fighters** : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6. Accidental Release Measures**

- Personal precautions, protective equipment and emergency procedures** : Keep unauthorized personnel away. Use personal protective equipment. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Methods and material for containment and cleaning up** : Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.
- Notification Procedures** : Prevent entry into waterways, sewer, basements or confined areas. Stop leak if you can do so without risk. Inform authorities if large amounts are involved.
- Environmental precautions** : Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

**MATERIAL SAFETY DATA SHEET****Product Name:** Potassium thiocyanate**CAS No.:** 333-20-0**Version:** 0**7. Handling and Storage**

- Precautions for safe handling** : Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Avoid inhalation of dust. Wash thoroughly after handling.
- Conditions for safe storage, including any incompatibilities** : Keep container tightly closed. Store in a cool and well-ventilated place. Store in a dry place. Store away from incompatible materials.

**8. Exposure Controls Personal Protection****Control parameters**

**Occupational exposure limits** : None of the components have assigned exposure limits.

**Appropriate engineering controls** : No data available.

**Individual protection measures, such as personal protective equipment**

**General information** : Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area.

**Eye/face protection** : Wear safety glasses with side shields (or goggles) and a face shield.

**Hand protection** : Chemical resistant gloves.

**Other** : Wear suitable protective clothing and gloves.

**Respiratory protection** : In case of inadequate ventilation use suitable respirator .

**Hygiene measures** : Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower.

**9. Physical and Chemical Properties**

**Appearance** : Colorless Solid Crystals

**Odor** : Odorless

**pH** : No data available.

**Melting point/freezing point** : 173 °C

**Initial boiling point and boiling range** : 500 °C

**Flash Point** : No data available

**Vapor pressure** : No data available

**Vapor density** : No data available

**Relative density** : 1.89 (20 °C)

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**Solubility in water** : Very Soluble  
**Solubility (other)** : No data available.  
**Formula** : CHNS.K  
**Molecular Weight** : 97.18 g/mol

**10. Stability and Reactivity**

**Reactivity** : No dangerous reaction known under conditions of normal use.  
**Chemical stability** : Stable; however, may decompose if heated.  
**Possibility of hazardous reactions** : Hazardous polymerization does not occur.  
**Conditions to avoid** : Contact with incompatible materials. Light.  
**Incompatible materials** : Strong oxidizing agents. Halogens and halogenated compounds.  
**Hazardous decomposition products** : Thermal decomposition may produce oxides of nitrogen. Cyanides.

**11. Toxicological Information****Information on likely routes of exposure**

**Ingestion** : Harmful if swallowed. May cause irritation of the gastrointestinal tract.  
**Inhalation** : Harmful if inhaled. May cause irritation to the respiratory system.  
**Skin contact** : Harmful in contact with skin. May cause irritation.  
**Eye contact** : Causes serious eye irritation. May irritate eyes

**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)**

**Oral Product** : No data available.  
**Dermal Product** : No data available.  
**Inhalation Product** : No data available  
**Repeated dose toxicity Product** : No data available.  
**Skin corrosion/irritation Product** : May cause skin irritation.  
**Serious eye damage/eye irritation Product** : Causes serious eye irritation. May irritate eyes.  
**Respiratory or skin sensitization Product** : Not a skin sensitizer.  
**Carcinogenicity Product** : This substance has no evidence of carcinogenic properties.  
**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans DIOXANE** : No carcinogenic components identified.  
**US. National Toxicology Program (NTP) Report on Carcinogens** : No carcinogenic components identified.

**MATERIAL SAFETY DATA SHEET****Product Name:** Potassium thiocyanate**CAS No.:** 333-20-0**Version:** 0**DIOXANE**

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)** : No carcinogenic components identified.

**Germ cell mutagenicity**

**In vitro Product** : No mutagenic components identified.

**In vivo Product**

: No mutagenic components identified.

**Reproductive toxicity Product**

: No data available.

**Specific target organ toxicity - single exposure Product**

: No data available.

**Specific target organ toxicity - repeated exposure Product**

: No data available.

**Aspiration hazard Product**

: Not classified

**Other effects**

: None known.

**12. Ecological Information****Ecotoxicity****Acute hazards to the aquatic environment :****Fish Product**

: No data available.

**Specified substance(s):**

POTASSIUM THIOCYANATE

: LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 12 h): 410 - 508 mg/l Mortality  
LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 12 h): 492 - 681 mg/l Mortality  
LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 12 h): 504 - 706 mg/l Mortality  
LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 18 h): 1,849 - 1,894 mg/l Mortality  
LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 24 h): 955 - 1,386 mg/l Mortality

**Aquatic invertebrates Product**

: No data available.

**Specified substance(s):**

POTASSIUM THIOCYANATE

: LC 50 (Water flea (Daphnia magna), 96 h): 1.16 - 8.946 mg/l Mortality  
LC 50 (Water flea (Daphnia magna), 96 h): 1.429 - 9.155 mg/l Mortality  
LC 50 (Water flea (Daphnia magna), 96 h): 22.03 - 41.633 mg/l Mortality  
LC 50 (Water flea (Daphnia magna), 96 h): 23.149 - 45.657 mg/l Mortality  
LC 50 (Water flea (Daphnia magna), 96 h): 23.86 - 46.937 mg/l Mortality

**Chronic hazards to the aquatic environment :****Fish Product**

: No data available.

**Aquatic invertebrates Product**

: No data available.

**Toxicity to Aquatic Plants Product:**

: No data available.

**Persistence and degradability****Biodegradation Product**

: There are no data on the degradability of this product.

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- BOD/COD ratio Product** : No data available.  
**Bioaccumulative potential**  
**Bioconcentration factor (BCF) Product** : No data available on bioaccumulation.  
**Partition coefficient n-octanol / water (log Kow) Product** : No data available.  
**Mobility in soil** : No data available.  
**Other adverse effects** : Harmful to aquatic life with long lasting effects. There are no data on the ecotoxicity of this product.

### 13. Disposal consideration

- Disposal instructions** : Discharge, treatment, or disposal may be subject to national, state, or local laws. Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.  
**Contaminated packaging** : Since emptied containers retain product residue, follow label warnings even after container is emptied.

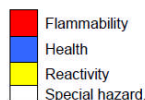
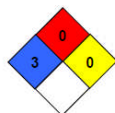
### 14. Transport information

	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
<b>DOT</b>			Not regulated.		
<b>IMDG</b>			Not regulated.		
<b>IATA</b>			Not regulated.		

### 15. Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture  
 No Data Available.

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Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

**Issue Date :**01/08/2014**Version : 0**

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