

# SAFETY DATA SHEET

According to US Regulation 29 CFR 1910.1200 (HazCom 2012)

## 1. Identification

**Product identifier:** Potassium Thiocyanate

**Other means of identification**

**Product No.:** 7168, 3326

**Recommended restrictions**

**Recommended use:** For Laboratory, Research or Manufacturing Use.

**Restrictions on use:** Not determined.

**Details of the supplier of the safety data sheet**

**Company Name:** Avantor Performance Materials, LLC  
**Address:** 100 Matsonford Rd, Suite 200  
Radnor, PA 19087

**Telephone:** Customer Service: 855-282-6867

**Contact Person:** Product Information Compliance  
**E-mail:** info@avantormaterials.com

**Emergency telephone number:**

CHEMTREC: 1-800-424-9300 within US and Canada

## 2. Hazard(s) 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

**Unknown toxicity - Health**

Acute toxicity, inhalation, dust or mist	100 %
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**Environmental Hazards**

Chronic hazards to the aquatic environment	Category 3
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**Unknown toxicity - Environment**

Acute hazards to the aquatic environment	0 %
Chronic hazards to the aquatic environment	100 %

**Label 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 Statements**

**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-ventilated area. Avoid release to the environment.

**Response:** Specific treatment (see on this label). IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. IF INHALED: Remove person to fresh air and keep 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.

**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.

**Hazard(s) not otherwise classified (HNOC):** None.

**3. Composition/information on ingredients**

**Substances**

Chemical Identity	CAS number	Content in percent (%)*
Potassium thiocyanate	333-20-0	90 - 100%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**4. First-aid measures**

**General information:** Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

**Ingestion:** Rinse mouth thoroughly. Drink a few glasses of water or milk. Call a POISON CENTER/doctor if you feel unwell.

**Inhalation:** Move to fresh air. Get medical attention if symptoms persist.

**Skin Contact:** Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing. Wash contaminated clothing before reuse.

**Eye contact:** Flush thoroughly with water. If irritation occurs, get medical assistance.

**Most important symptoms/effects, acute and delayed**

**Symptoms:** Harmful if inhaled. Harmful if swallowed. Causes serious eye irritation.

**Hazards:** None known.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** Treat symptomatically. Symptoms may be delayed.

**5. Fire-fighting measures**

**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. See Section 8 of the SDS for Personal Protective Equipment.

**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.

**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.

## 7. Handling and storage

<b>Precautions for safe handling:</b>	Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Avoid inhalation of dust. Wash thoroughly after handling.
<b>Conditions for safe storage, including any incompatibilities:</b>	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

<b>General information:</b>	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.
<b>Eye/face protection:</b>	Wear safety glasses with side shields (or goggles) and a face shield.
<b>Skin Protection</b>	
<b>Hand Protection:</b>	Wear protective gloves.
<b>Other:</b>	Wear suitable protective clothing.
<b>Respiratory Protection:</b>	In case of inadequate ventilation use suitable respirator.
<b>Hygiene measures:</b>	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

<b>Physical state:</b>	Solid
<b>Form:</b>	Crystals
<b>Color:</b>	White
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	4.8 (1,070 g/l, 20.1 °C)
<b>Melting point/freezing point:</b>	177 °C
<b>Initial boiling point and boiling range:</b>	500 °C
<b>Flash Point:</b>	No data available.
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Upper/lower limit on flammability or explosive limits</b>	

<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.
<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	No data available.
<b>Density:</b>	1.89 g/ml (20 °C)
<b>Relative density:</b>	1.89 (20 °C)
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	Very Soluble
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.
<b>Other information</b>	
<b>Molecular weight:</b>	97.18 g/mol (CHNS.K)

## 10. Stability and reactivity

<b>Reactivity:</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid:</b>	Contact with incompatible materials. Light.
<b>Incompatible Materials:</b>	Strong oxidizing agents. Halogens and halogenated compounds.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition may produce oxides of nitrogen. Cyanides.

## 11. Toxicological information

### Information on likely routes of exposure

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

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

<b>Oral</b>	
<b>Product:</b>	LD 50 (Quail, Japanese (Coturnix coturnix japonica)): 508 mg/kg
<b>Dermal</b>	
<b>Product:</b>	LD 50 (Rat) > 2,000 mg/kg
<b>Inhalation</b>	

**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:**

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**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 (Oncorhynchus mykiss, 96 h): 93 - 238 mg/l  
NOAEL (Danio rerio, 96 h): >= 100.1 mg/l

**Aquatic Invertebrates**

**Product:** No data available.

**Specified substance(s):**

Potassium thiocyanate LC 50 (Water flea (Daphnia pulex), 48 h): 0.79 - 15 mg/l  
LOAEL (Daphnia magna, 48 h): 4 mg/l  
NOAEL (Daphnia magna, 48 h): 2 mg/l  
EC 50 (Daphnia magna, 48 h): 3.56 mg/l

**Chronic hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Specified substance(s):**

Potassium thiocyanate LOAEL (Pimephales promelas, 124 d): 12.2 mg/l  
LOAEL (Cyprinus carpio, 7 d): 40 mg/l  
NOAEL (Cyprinus carpio, 7 d): 20 mg/l  
LOAEL (Oncorhynchus mykiss, 16 Weeks): 115 mg/l  
NOAEL (Oncorhynchus mykiss, 16 Weeks): 77 mg/l

**Aquatic Invertebrates**

**Product:** No data available.

**Specified substance(s):**

Potassium thiocyanate LOAEL (Daphnia magna, 21 d): 2.5 - 5 mg/l  
NOAEL (Daphnia magna, 21 d): 1.25 mg/l  
EC 50 (Daphnia magna, 21 d): 2.6 mg/l

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Persistence and Degradability**

**Biodegradation**

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

**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 considerations**

**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local laws. Discharge, treatment, or disposal may be subject to national, state, or local laws.

**Contaminated Packaging:** Since emptied containers retain product residue, follow label warnings even after container is emptied. Since emptied containers retain product residue, follow label warnings even after container is emptied.

**14. Transport information**

**DOT**  
Not regulated.

**IMDG**  
Not regulated.

**IATA**  
Not regulated.

**15. Regulatory information**

**US Federal Regulations**  
**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**  
 None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**  
 None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**  
 None present or none present in regulated quantities.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**  
 Acute toxicity (any route of exposure)

**SARA 302 Extremely Hazardous Substance**  
 None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**  
 None present or none present in regulated quantities.

**SARA 311/312 Hazardous Chemical**

Chemical Identity	Threshold Planning Quantity
Potassium thiocyanate	10000 lbs.
Potassium thiocyanate	10000 lbs.

**SARA 313 (TRI Reporting)**  
 None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3):**

None present or none present in regulated quantities.

**US State Regulations**

**US. California Proposition 65**

No ingredient requiring a warning under CA Prop 65.

**US. New Jersey Worker and Community Right-to-Know Act**

No ingredient regulated by NJ Right-to-Know Law present.

**US. Massachusetts RTK - Substance List**

No ingredient regulated by MA Right-to-Know Law present.

**US. Pennsylvania RTK - Hazardous Substances**

No ingredient regulated by PA Right-to-Know Law present.

**US. Rhode Island RTK**

No ingredient regulated by RI Right-to-Know Law present.

**International regulations**

**Montreal protocol**

Not applicable

**Stockholm convention**

Not applicable

**Rotterdam convention**

Not applicable

**Kyoto protocol**

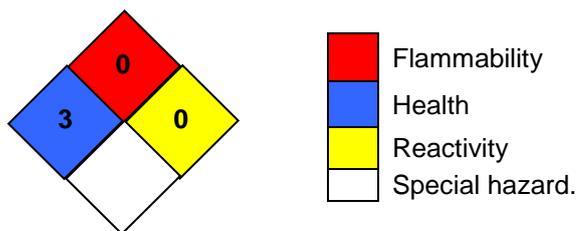
Not applicable

**Inventory Status:**

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
EINECS, ELINCS or NLP:	On or in compliance with the inventory
Japan (ENCS) List:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Japan ISHL Listing:	On or in compliance with the inventory
Mexico INSQ:	Not in compliance with the inventory.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory

**16. Other information, including date of preparation or last revision**

**NFPA Hazard ID**



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

**Issue Date:** 02-12-2019

**Revision Information:** Not relevant.

**Version #:** 1.1

**Source of information:** Sources of information used in preparing this SDS included one or more of the following: results from in house or supplier toxicology studies, information from the Toxicology Data Network (TOXNET), European Chemical Agency (ECHA) substance dossiers, IARC Monographs, US National Toxicology Program data, the Agency for Toxic Substances and Disease Registry, other manufacturer’s SDSs and other sources, as appropriate.

**Further Information:** No data available.

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