

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name	Potassium Thiocyanate
CAS number	333-20-0
Synonyms	Potassium rhodanide; rodanca; arterocyn

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Laboratory chemicals.
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#### 1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

#### 1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute Oral Toxicity	Category 4
Acute Dermal Toxicity	Category 4
Acute Inhalation Toxicity - Dusts and Mists	Category 4

#### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Warning

Hazard statements

Harmful if swallowed, in contact with skin, or if inhaled.

Precautionary statements

Prevention: Wash face, hands, and any exposed skin 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.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Disposal: Dispose of contents/container to to an approved waste disposal plant.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Harmful to aquatic life with long lasting effects.  
Contact with acids liberate very toxic gas.

## SECTION 3: Composition/information on ingredients

### 3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Potassium thiocyanate	Potassium rhodanide; rodanca; arterocyn	333-20-0	> 95%

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

General advice

<b>If inhaled</b>	Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
<b>In case of skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
<b>In case of eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
<b>If swallowed</b>	Do NOT induce vomiting. Call a physician or poison control center immediately.

#### 4.2 Most important symptoms and effects, both acute and delayed

Metabolism may release cyanide, which may result in headache, dizziness, weakness, collapse, unconsciousness, and possible death. May cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood).

#### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

**Suitable extinguishing media** No information available.

**Unsuitable extinguishing media** No information available.

#### 5.2 Specific hazards arising from the substance or mixture

Keep product and empty container away from heat and sources of ignition.  
Hazardous Combustion Products: Nitrogen oxides (NO<sub>x</sub>), Sulfur oxides, Potassium oxides.

#### 5.3 Special protective equipment and precautions for firefighters

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

#### 5.4 Further information

**Flash Point** No information available.

**Autoignition Temperature** No information available.

**Explosion limits**

**Upper** No data available.

**Lower** No data available.

**Sensitivity to Mechanical Impact**

**Sensitivity to Static Discharge**

**NFPA**

Health	Flammability	Instability	Physical hazards
2	1	1	N/A

**SECTION 6: Accidental release measures**

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

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation. Avoid contact with skin and eyes. Keep people away from and upwind of spill/leak.

**6.2 Environmental precautions**

Do not flush into surface water or sanitary sewer system. Avoid release to the environment. Collect spillage.

**6.3 Methods and materials for containment and cleaning up**

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

**6.4 Reference to other sections**

See Section 2 for full list of hazard and precaution statements. See Section 12 for additional Ecological Information.

**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

**Precautions on safe handling**

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

**Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice.

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage conditions**

Keep containers tightly closed in a dry, cool, and well-ventilated place. Keep away from acids and incompatible materials.

### Incompatibilities

Strong oxidizing agents, acids, and strong bases.

## SECTION 8: Exposure controls/personal protection

### 8.1 Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Potassium thiocyanate	(Vacated) TWA	5 mg/m <sup>3</sup>

#### US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Potassium thiocyanate	IDLH	25 mg/m <sup>3</sup>

#### Biological occupational exposure limits

No information available.

### 8.2 Exposure controls

#### Appropriate engineering controls

Ensure that eyewash stations and safety showers are close to the workstation location.  
Ensure adequate ventilation, especially in confined areas.

#### Personal protective equipment

##### Eye/face protection

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 EN 166.

##### Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

##### Body Protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

##### Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

#### Control of environmental exposure

No information available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical State	Crystalline solid
Appearance	Colorless - White
Odor	Odorless
Odor Threshold	No information available
pH	5.3 - 8.7 5% aq.solution
Melting Point/Range	170-179°C / 338-354.2°F
Boiling Point/Range	Decomposes
Evaporation Rate	Not applicable
Flammability (solid)	No information available
Flammability or explosive limit	No data available
Upper	
Lower	
Vapor Pressure	No information available
Vapor Density	No information available
Density	No information available
Solubility	Soluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No information available
Decomposition Temp	500°C
Viscosity	Not applicable
Molecular Formula	KSCN
Molecular Weight	97.18 g/mol
VOC Content(%)	No information available
Oxidizing properties	Not oxidizing

### 9.2 Other safety information

No information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Known reactive hazard.

### 10.2 Chemical stability

Light sensitive, moisture sensitive, air sensitive.

### 10.3 Possibility of hazardous reactions

Contact with acid liberates very toxic gas.

### 10.4 Conditions to avoid

Incompatible products, excess heat, dust formation, exposure to light, and exposure to air, moist air, and water.

### 10.5 Incompatible materials

Strong oxidizing agents, acids, strong bases.

### 10.6 Hazardous decomposition products

Nitrogen oxides (NOx), Sulfur oxides, Potassium oxides.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

##### Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium thiocyanate	854 mg/kg (Rat)	> 2000 mg/kg (Rat)	-

##### Skin corrosion/irritation

No information available.

##### Serious eye damage/eye irritation

No information available.

##### Respiratory or skin sensitization

No information available.

##### Germ cell mutagenicity

No information available.

##### Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Potassium thiocyanate	333-20-0	Not listed	Not listed	Not listed	Not listed	Not listed

##### Specific target organ toxicity - single exposure

None known.

##### Specific target organ toxicity - repeated exposure

None known.

##### Reproductive toxicity

No information available.

##### Chronic effects

Metabolism may release cyanide, which may result in headache, dizziness, weakness, collapse, unconsciousness, and possible death. May cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood).

## 11.2 Additional Information

The toxicological properties have not been fully investigated.

## SECTION 12: Ecological information

### 12.1 Toxicity

Product	Species	Test Results
Potassium thiocyanate	Freshwater Fish (Oncorhynchus mykiss)	LC50: 11 mg/l/96h
	Water Flea (Dahnia Magna)	EC50: 2.8 mg/l/96h

### 12.2 Persistence and degradability

Soluble in water. Persistence is unlikely based on information available.

### 12.3 Bio accumulative potential

No information available.

### 12.4 Mobility in soil

Likely mobile in the environment due to its water solubility.

### 12.5 Results of PBT and vPvB assessment

No information available.

### 12.6 Endocrine disrupting properties

No information available.

### 12.7 Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### 13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## SECTION 14: Transport information

**DOT (US)**

Not regulated.



**IMDG** Not regulated.

**IATA** Not regulated.

## SECTION 15: Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**  
Not applicable.

**CERCLA Hazardous Substance List (40 CFR 302.4)**  
Not applicable.

**SARA 304 Emergency release notification**  
Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**  
Not regulated.

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

**SARA 302 Extremely hazardous substance**  
Not listed.

**SARA 311/312 Hazardous**  
See Section 2 for more information.

**SARA 313 (TRI reporting)**  
Not regulated

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**  
Listed.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**  
Not regulated.

**Safe Drinking Water Act**  
Not regulated.

**Clean Water Act (CWA)**  
Listed: Toxic Pollutants, Priority Pollutants.

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**  
Not listed.

**US state regulations**

**US. Massachusetts RTK - Substance List**

Not listed.

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

Listed.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Listed.

**California Proposition 65**

Not listed.

**SECTION 16: Other information**

Issue date: 09/13/2024

**SECTION 17: Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.