

MATERIAL SAFETY DATA SHEET

Product: **Potassium Thiocyanate**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: Potassium Thiocyanate, Purified, Technical

Product Code: CH-333200A

Chemical Formula: KCNS

General or Generic ID: Potassium Sulfocyanate; Potassium Isothiocyanate; Potassium Thiocyanide; Aterocyn; Kyonate; Rodanca

Company

ArtChemicals.com
2250 Davis Street
San Leandro, CA 94577-2204
510-639-4670

Emergency Telephone Number:

1-800-451-8346

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS No.</u>	<u>Chemical Identity</u>	<u>Common Name</u>	<u>%</u>
333-20-0	N/A	Potassium Thiocyanate	100

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye:

Hazardous in case of eye contact (irritant). Symptoms include stinging, tearing, redness and impairment of vision. The degree of injury will depend on the amount of material that gets into the eye and the speed and thoroughness of the first aid treatment.

Skin:

Hazardous in case of skin contact (irritant/permeator/sensitizer). Symptoms may include redness, burning of skin, or, occasionally, blistering. The degree of injury will depend on the amount of material that gets on the skin and the speed and thoroughness of the first aid treatment.

Product: **Potassium Thiocyanate**

Ingestion:

Hazardous in case of ingestion. Inhalation of dust will produce irritation to gastro-intestinal tract.

Inhalation:

Hazardous in case of inhalation (lung irritant). Breathing in any amounts may cause respiratory irritation, burning, sneezing and coughing.

Symptoms of Exposure:

Not available.

Development Information:

Not available.

The substance is toxic to the nervous system.

The substance may be toxic to blood, cardiovascular system, urinary system, thyroid.

Repeated or prolonged exposure to the substance can produce target organs damage.

Cancer Information:

Not available.

Primary Route(s) of Entry:

Inhalation, skin absorption, skin contact, and eye contact.

4. FIRST AID MEASURES

Inhalation:

If affected, promptly remove individual to fresh air. If not breathing, give artificial respiration. Get medical attention.

Ingestion:

Do NOT induce vomiting, unless directed by medical personnel. Seek medical attention. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Do not leave individual unattended. Loosen tight clothing such as collar, tie, belt or waistband.

Eyes:

Remove contact lenses if worn. Spread eyelids with fingers and flush eye for minimum of 15 minutes with water; keep rotating the eyes to ensure complete flushing. Do not use an eye ointment. Seek medical attention.

MATERIAL SAFETY DATA SHEET

Product: **Potassium Thiocyanate**

Skin:

Immediately remove contaminated clothing and thoroughly flush skin with plenty of water (15 minutes). Wash thoroughly with soap and water. Seek medical attention immediately. Launder clothing before reuse.

Note to Physicians:

Not available.

5. FIRE FIGHTING MEASURES

Flash Point: Non-flammable. Not available.

Explosive Limit: Not applicable.

Auto-ignition Temperature: Not applicable.

Hazardous Products of Combustion: Not applicable.

Extinguishing Media: Not applicable.

SPECIAL FIRE-FIGHTING PROCEDURES: When heated to decomposition it emits very toxic fumes, possibly cyanide gas. Contact with oxidizers may cause fire.

NFPA CODES: Health = 2 Flammability = 0 Reactivity = 0

6. PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled:

Small Spill:

Absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface. Dispose of according to local and regional authority requirements.

Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be

Product: **Potassium Thiocyanate**

careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

7. PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep container tightly closed. Keep container in a cool, well-ventilated area. Sensitive to light. Store in light-resistant containers. Moisture sensitive. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids, alkalis.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Be sure to use an approved/certified respirator or equivalent.

Skin Protection:

Wear resistant gloves. To prevent repeated or prolonged skin contact, wear impervious clothing and boots or lab coat.

Eye Protection:

Chemical splash goggles in compliance with OSHA regulations are advised. Face shield. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Other Protective Clothing or Equipment:

Provide sufficient mechanical ventilation to maintain exposure below level of overexposure. Boots. Full suit. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling product.

Consult local authorities for acceptable exposure limits.

MATERIAL SAFETY DATA SHEET

Product: **Potassium Thiocyanate**

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: White deliquescent crystal solid. (Odorless).

Molecular Weight: 97.18 g/mole

pH: Not available.

Boiling Point: 500 °C (932 °F)

Melting Point: 173 °C (343.4 °F).

Specific Gravity: 1.89 (Water=1)

Vapor Pressure: 58.6 kPa (@20 °C).

Evaporation Rate: Not available.

Solubility in Water: Easily soluble in cold water.

10. STABILITY AND REACTIVITY

Incompatibility: Reactive with oxidizing agents and acids.

Stability: Stable.

Hazardous Decomposition: N/A

Hazardous Polymerization: Will not occur.

SPECIAL REMARKS ON REACTIVITY: Sensitive to light. Slowly decomposes on exposure to light. Also incompatible with active halogen compounds. Incompatible with acids (mineral, non-oxidizing, e.g. hydrochloric acid, hydrofluoric acid, muriatic acid, phosphoric acid), acids (mineral, oxidizing, e.g. chromic acid, hypochlorous acid, nitric acid, sulfuric acid), acids (organic, e.g. acetic acid, benzoic acid, formic acid, methanoic acid, oxalic acid), oxidizers (chlorates, peroxides, nitrates, nitrites). Contact with acids liberates toxic cyanide gas or hydrogen sulfide. Moisture sensitive

11. TOXICOLOGICAL INFORMATION

LD50: 594 mg/kg [Mouse].

Acute Potential Health Effects:

Skin: Causes skin irritation. May cause ulcers, discoloration, eczema. It can be absorbed through the skin.

Eyes: Causes eye irritation and swelling of the eye lids. It may cause blurred vision.

Inhalation: May cause respiratory tract and mucous membrane irritation. Symptoms may include coughing, chest pain, difficulty breathing.

MATERIAL SAFETY DATA SHEET

Product: **Potassium Thiocyanate**

Ingestion: May be harmful if swallowed. May cause gastrointestinal tract irritation with nausea, ulceration or bleeding from stomach, and vomiting. It may also affect behavior/central nervous system (hallucinations, delirium, confusion, distorted perceptions, disorientation, toxic psychosis, convulsions, muscle weakness), respiration (dyspnea), cardiovascular system (hypotension, cardiovascular collapse). Ingestion may also cause skin eruptions.

Chronic Potential Health Effects:

Ingestion: Prolonged or repeated ingestion may affect metabolism, thyroid (goiter, hypothyroidism), blood, and urinary system in addition to behavior/central nervous system.

Skin: Repeated or prolonged skin contact can cause dermatitis.

12. ECOLOGICAL INFORMATION

Not available.

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. The product itself and its products of degradation are less toxic.

13. DISPOSAL CONSIDERATION

Waste Disposal Method:

Dispose of in accordance with all applicable local, state and federal regulations.

14. DOT SHIPPING NAME & IDENTIFICATION:

NON-REGULATED. Not a DOT controlled material (United States).

15. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that information is current, applicable, and suitable to their circumstances.