



Health	1
Fire	0
Reactivity	0
Personal Protection	G

# Material Safety Data Sheet

## Potassium Thiocyanate 20% (w/v) MSDS

### Section 1: Chemical Product and Company Identification

**Product Name:** Potassium Thiocyanate 20% (w/v)

**Catalog Codes:** SLP4072

**CAS#:** Mixture.

**RTECS:** Not applicable.

**TSCA:** TSCA 8(b) inventory: Water; Potassium thiocyanate

**CI#:** Not available.

**Synonym:** Potassium Thiocyanate, 20% (w/v) Solution

**Chemical Name:** Not applicable.

**Chemical Formula:** Not applicable.

**Contact Information:**

**Sciencelab.com, Inc.**

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: [ScienceLab.com](http://ScienceLab.com)

**CHEMTREC (24HR Emergency Telephone), call:**

1-800-424-9300

**International CHEMTREC, call:** 1-703-527-3887

**For non-emergency assistance, call:** 1-281-441-4400

### Section 2: Composition and Information on Ingredients

**Composition:**

Name	CAS #	% by Weight
Water	7732-18-5	80
Potassium thiocyanate	333-20-0	20

**Toxicological Data on Ingredients:** Potassium thiocyanate: ORAL (LD50): Acute: 854 mg/kg [Rat]. 594 mg/kg [Mouse].

### Section 3: Hazards Identification

**Potential Acute Health Effects:**

Hazardous in case of inhalation (lung irritant). Slightly hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion.

**Potential Chronic Health Effects:**

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to the nervous system. The substance may be toxic to blood, cardiovascular system, , thyroid. Repeated or prolonged exposure to the substance can produce target organs damage.

### Section 4: First Aid Measures

**Eye Contact:**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

**Skin Contact:**

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

**Serious Skin Contact:** Not available.

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Serious Inhalation:** Not available.

**Ingestion:**

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

**Serious Ingestion:** Not available.

### Section 5: Fire and Explosion Data

**Flammability of the Product:** Non-flammable.

**Auto-Ignition Temperature:** Not applicable.

**Flash Points:** Not applicable.

**Flammable Limits:** Not applicable.

**Products of Combustion:** Not available.

**Fire Hazards in Presence of Various Substances:** Not applicable.

**Explosion Hazards in Presence of Various Substances:** Non-explosive in presence of open flames and sparks, of shocks.

**Fire Fighting Media and Instructions:** Not applicable.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Contact with oxidizers may cause explosion. (Potassium thiocyanate)

### Section 6: Accidental Release Measures

**Small Spill:**

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:**

Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

### Section 7: Handling and Storage

**Precautions:**

Do not ingest. Do not breathe gas/fumes/ vapor/spray. If ingested, seek medical advice immediately and show the container or the label.

**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.

## Section 8: Exposure Controls/Personal Protection

### Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

### Personal Protection:

Safety glasses. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

### Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not available.

## Section 9: Physical and Chemical Properties

**Physical state and appearance:** Liquid.

**Odor:** Odorless.

**Taste:** Not available.

**Molecular Weight:** Not applicable.

**Color:** Clear Colorless.

**pH (1% soln/water):** Neutral.

**Boiling Point:** The lowest known value is 100°C (212°F) (Water).

**Melting Point:** Not available.

**Critical Temperature:** Not available.

**Specific Gravity:** Weighted average: 1.1 (Water = 1)

**Vapor Pressure:** The highest known value is 2.3 kPa (@ 20°C) (Water).

**Vapor Density:** The highest known value is 0.62 (Air = 1) (Water).

**Volatility:** Not available.

**Odor Threshold:** Not available.

**Water/Oil Dist. Coeff.:** Not available.

**Ionicity (in Water):** Not available.

**Dispersion Properties:** See solubility in water, acetone.

### Solubility:

Easily soluble in cold water, hot water. Soluble in acetone.

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Incompatible materials

**Incompatibility with various substances:** Slightly reactive to reactive with oxidizing agents, acids.

**Corrosivity:** Non-corrosive in presence of glass.

**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 (Potassium thiocyanate)

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Will not occur.

## Section 11: Toxicological Information

**Routes of Entry:** Absorbed through skin. Eye contact.

**Toxicity to Animals:** Acute oral toxicity (LD50): 2970 mg/kg (Mouse) (Calculated value for the mixture).

**Chronic Effects on Humans:** Contains material which may cause damage to the following organs: blood, cardiovascular system, , thyroid.

**Other Toxic Effects on Humans:**

Hazardous in case of inhalation (lung irritant). Slightly hazardous in case of skin contact (irritant, permeator), of ingestion, .

**Special Remarks on Toxicity to Animals:**

Lowest Published Lethal Dose: LDL [Human] - route: oral; Dose: 80 mg/kg (Potassium thiocyanate)

**Special Remarks on Chronic Effects on Humans:** May cause birth defects (teratogenic) based on animal test data. (Potassium thiocyanate)

**Special Remarks on other Toxic Effects on Humans:**

Acute Potential Health Effects: Skin: It may cause skin irritation. It can be absorbed through the skin Eyes: It may cause eye irritation. Inhalation: May cause respiratory tract and mucous membrane irritation. Symptoms may include coughing, chest pain, difficulty breathing. Ingestion: It may cause gastrointestinal tract irritation with nausea, 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.

## Section 12: Ecological Information

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The product itself and its products of degradation are not toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

## Section 13: Disposal Considerations

**Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## Section 14: Transport Information

**DOT Classification:** Not a DOT controlled material (United States).

**Identification:** Not applicable.

**Special Provisions for Transport:** Not applicable.

## Section 15: Other Regulatory Information

**Federal and State Regulations:** TSCA 8(b) inventory: Water; Potassium thiocyanate

**Other Regulations:** OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**Other Classifications:**

**WHMIS (Canada):** Not controlled under WHMIS (Canada).

**DSCL (EEC):**

R32- Contact with acids liberates very toxic gas. R36/37/38- Irritating to eyes, respiratory system and skin. S2- Keep out of the reach of children. S46- If swallowed, seek medical advice immediately and show this container or label.

**HMIS (U.S.A.):**

**Health Hazard:** 1

**Fire Hazard:** 0

**Reactivity:** 0

**Personal Protection:** g

**National Fire Protection Association (U.S.A.):**

**Health:** 1

**Flammability:** 0

**Reactivity:** 0

**Specific hazard:**

**Protective Equipment:**

Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

## Section 16: Other Information

**References:** Not available.

**Other Special Considerations:** Not available.

**Created:** 10/10/2005 11:49 AM

**Last Updated:** 11/01/2010 12:00 PM

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