Fisher Scientific

MATERIAL SAFETY DATA SHEET
Potassium thiocyanate

Section 1 - Chemical Product and Company Identification

MSDS Name: Potassium thiocyanate

Catalog Numbers: P/7240/50, P/7240/53, P/7280/50, P/7280/53

Synonyms: Thiocyanic acid, potassium salt; Potassium rhodanide; Potassium sulfocyanate.

Company Identification: Fisher Scientific UK
Bishop Meadow Road, Loughborough
Leics. LE11 5RG

For information in Europe, call: (01509) 231166

Emergency Number, Europe: 01509 231166

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
333-20-0	Potassium thiocyanate	98-100	206-370-1

Hazard Symbols: XN

Risk Phrases: 20/21/22 32 52/53

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Harmful by inhalation, in contact with skin and if swallowed. Contact with acids liberates very toxic gas. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Potential Health Effects

Eye: Causes redness and pain.

Skin: May cause skin irritation. Harmful if absorbed through the skin.

Ingestion: Harmful if swallowed. May cause irritation of the digestive tract. May cause headache. May cause nausea and vomiting.

Inhalation: Harmful if inhaled. May cause respiratory tract irritation. Prolonged exposure may result in dizziness and general weakness.

Chronic: Prolonged absorption of thiocyanates may produce various skin eruptions, running nose, dizziness, cramps, nausea and vomiting.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to Physician:

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Substance is noncombustible.

Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use only in a chemical fume hood.

Storage: Store in a cool, dry place. Store in a tightly closed container. Keep away from acids. Store protected from moisture. Store protected from light.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

Exposure Limits

CAS# 333-20-0:

United States OSHA: 5 mg/m3 TWA (Cyanide anion).

Netherlands: (cyanide anion): 1 mg/m3 MAC; 10 mg/m3 MAC

Personal Protective Equipment

Eyes: 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 EN166.

Skin: Wear appropriate gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: 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.

Section 9 - Physical and Chemical Properties

Physical State: Crystals

Color: colorless or white

Odor: odorless

pH: 5.3-8.7 (5% soln)

Vapor Pressure: < 1 hPa @ 20 deg C

Viscosity:	No data
Boiling Point:	500 deg C (932.00°F)
Freezing/Melting Point:	170-179 deg C
Autoignition Temperature:	Not available.
Flash Point:	Not available
Explosion Limits: Lower:	Not available
Explosion Limits: Upper:	Not available
Decomposition Temperature:	Not available
Solubility in water:	Soluble
Specific Gravity/Density:	1.886
Molecular Formula:	KSCN
Molecular Weight:	97.18

Section 10 - Stability and Reactivity

Chemical Stability:	Moisture sensitive. Light sensitive.
Conditions to Avoid:	Incompatible materials, light, dust generation, moisture, excess heat.
Incompatibilities with Other Materials	Strong oxidizing agents, acids, strong bases.
Hazardous Decomposition Products	Hydrogen cyanide, carbon monoxide, oxides of nitrogen, oxides of sulfur, carbon dioxide, cyanide fumes, oxides of potassium.
Hazardous Polymerization	Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 333-20-0: XL1925000

LD50/LC50: RTECS:
CAS# 333-20-0: Oral, mouse: LD50 = 594 mg/kg;
Oral, mouse: LD50 = 590 mg/kg;
Oral, rat: LD50 = 854 mg/kg;
.
Other: Human oral TDLo: 428 mg/kg, toxic psychosis, hallucinations, distorted perceptions, gastritis.; Human oral LDLo: 80 mg/kg, hallucinations, distorted perceptions, convulsions, muscle weakness; Rabbit oral LDLo: 500 mg/kg; Guinea pig oral LDLo: 600 mg/kg; Frog oral LDLo: 300 mg/kg.

Carcinogenicity: Potassium thiocyanate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: Biodegradable. Do not empty into drains.

Section 13 - Disposal Considerations

Products considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local authority or advice. Empty containers must be decontaminated before returning for recycling.

Section 14 - Transport Information

	IATA	IMO	RID/ADR
Shipping Name:	Not Regulated.	Not Regulated.	Not Regulated.
Hazard Class:			
UN Number:			
Packing Group:			

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R 32 Contact with acids liberates very toxic gas.

R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 13 Keep away from food, drink and animal feeding stuffs.

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 333-20-0: Not available

Canada

CAS# 333-20-0 is listed on Canada's DSL List

US Federal

TSCA

CAS# 333-20-0 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 12/12/1997

Revision #9 Date 2/15/2008
