

Material Safety Data Sheet

Creation Date 15-Feb-2010

Revision Date 15-Feb-2010

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name

Potassium thiocyanate

Cat No.

Synonyms

Recommended Use

Company

Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100

AC377430000; AC377430025; AC377431000; AC377435000

Potassium rhodanide

Laboratory chemicals

Entity / Business Name Acros Organics One Reagent Lane Fair Lawn, NJ 07410

Emergency Telephone Number For information in the US, call: 800-ACROS-01 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99 Emergency Number, US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300 CHEMTREC Phone Number, Europe: 703-527-3887

2. HAZARDS IDENTIFICATION

WARNING! Emergency Overview Harmful by inhalation, in contact with skin and if swallowed. May cause skin, eye, and respiratory tract irritation. Contact with acids liberates very toxic gas. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Appearance Colorless - White Physical State Solid odor odorless

Target Organs

None known.

Potential Health Effects

Acute Effects Principle Routes of Exposure

Eyes Skin Inhalation Ingestion	May cause irritation. Harmful in contact with skin. May cause irritation. Harmful by inhalation. May cause irritation of respiratory tract. Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic Effects	None known.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Haz/Non-haz

Component	CAS-No	Weight %
Potassium thiocyanate	333-20-0	>95

4. FIRST AID MEASURES

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.
Ingestion	Do not induce vomiting. Call a physician or Poison Control Center immediately.
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point Method	No information available. No information available.
Autoignition Temperature Explosion Limits	No information available.
Upper Lower	No data available No data available
Suitable Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable Extinguishing Media	No information available.
Hazardous Combustion Products	No information available.
Sensitivity to mechanical impact	No information available.

Sensitivity to static discharge

No information available.

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition

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. Thermal decomposition can lead to release of irritating gases and vapors.

<u>NFPA</u>	Health 2	Flammability 0	Instability 1	Physical hazards N/A
6. ACCIDENTAL RELEASE MEASURES				

 Personal Precautions
 Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.

 Environmental Precautions
 Should not be released into the environment.

 Methods for Containment and Clean Up
 Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

7. HANDLING AND STORAGE

Handling

Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Store under an inert atmosphere. Keep away from acids.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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Engineering Measures
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Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium thiocyanate			IDLH: 25 mg/m ³

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Potassium thiocyanate	Ceiling: 10 ppm	TWA: 5 mg/m ³	
	Ceiling: 11 mg/m ³ Skin		

NIOSH IDLH: Immediately Dangerous to Life or Health

Personal Protective Equipment Eye/face Protection

> Skin and body protection Respiratory 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 EN166. Wear appropriate protective gloves and clothing to prevent skin exposure. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Appearance odor **Odor Threshold** pН Vapor Pressure Vapor Density Viscosity **Boiling Point/Range** Melting Point/Range **Decomposition temperature** Flash Point **Evaporation Rate** Specific Gravity Solubility log Pow Molecular Weight **Molecular Formula**

Solid Colorless - White odorless No information available. 5.3-8.7 5% ag.solution <1 hPa @ 20 °C No information available. No information available. No information available.°C 170 - 179°C / 338 - 354.2°F 500 °C No information available. negligible 1.886 Soluble in water No data available 97.18 CKNS

10. STABILITY AND REACTIVITY

Stability

Conditions to Avoid

Incompatible Materials

Hazardous Decomposition Products

Hazardous Polymerization

Hazardous Reactions .

Light sensitive. Moisture sensitive. Air sensitive.

Incompatible products. Excess heat. Avoid dust formation. Exposure to light. Exposure to moist air or water. Exposure to air.

Strong oxidizing agents, Acids, Strong bases

Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NOx), Sulfur oxides

Hazardous polymerization does not occur.

Contact with acids liberates very toxic gas..

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium thiocyanate	854 mg/kg (Rat)	Not listed	Not listed

Irritation

No information available.

Toxicologically Synergistic Products

No information available.

Chronic Toxicity	
Carcinogenicity	There are no known carcinogenic chemicals in this product
Sensitization	No information available.
Mutagenic Effects	No information available.
Reproductive Effects	No information available.
Developmental Effects	No information available.
Teratogenicity	No information available.
Other Adverse Effects	See actual entry in RTECS for complete information.
Endocrine Disruptor Information	No information available
	12. ECOLOGICAL INFORMATION

Ecotoxicity

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

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Potassium thiocyanate	Not listed	Oncorhynchus mykiss: LC50:	Not listed	Dahnia Magna: EC50:
		>100 mg/L/96h		11mg/L/48h

Persistence and Degradability	Readily biodegradable.
Bioaccumulation/ Accumulation	No information available

Mobility No information available

13. DISPOSAL CONSIDERATIONS

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Waste Disposal Methods
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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.

14. TRANSPORT INFORMATION

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DOT	Not regulated	
TDG	Not regulated	
ΙΑΤΑ	Not regulated	
IMDG/IMO	Not regulated	

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Potassium thiocyanate	Х	Х	-	206-370- 1	-		Х	Х	Х	Х	KE- 29216 X

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Potassium thiocyanate	333-20-0	>95	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act Not applicable

Clean Air Act Not applicable

Not applicable

OSHA

Not applicable

CERCLA Not Applicable

California Proposition 65

This product does not contain any Proposition 65 chemicals.

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Potassium thiocyanate	-	Х	Х	-	-

U.S. Department of Transportation

Reportable Quantity (RQ):		
DOT Marine Pollutant	Y	
DOT Severe Marine Pollutant	Ν	

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class D1B Toxic materials



16. OTHER INFORMATION

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Prepared By	Regulatory Affairs Thermo Fisher Scientific Tel: (412) 490-8929			
Creation Date	15-Feb-2010			
Print Date	15-Feb-2010			
Revision Summary	"***", and red text indicates revision			

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.

End of MSDS