



Material Safety Data Sheet

Sodium thiocyanate, ACS

Section 1 - Chemical Product and Company Identification

MSDS Name:

Sodium thiocyanate, ACS

Catalog Numbers:

LC24960

Synonyms:

Thiocyanic acid, sodium salt; Sodium rhodanide; Sodium sulfocyanate

Company Identification:LabChem, Inc.
200 William Pitt Way
Pittsburgh, PA 15238**Company Phone Number:**

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
540-72-7	Sodium thiocyanate	100

Section 3 - Hazards Identification

Emergency Overview

Appearance: *White crystalline powder***Warning!** Harmful if swallowed. Contact with acids liberates hydrogen cyanide, a very toxic, flammable gas or liquid. May cause eye, skin, and respiratory tract irritation. May be harmful if absorbed through skin or if inhaled. Light sensitive. Hygroscopic (absorbs moisture from the air). Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment.**Target Organs:** Central nervous system, cardiovascular system, thyroid, skin.

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation. May be absorbed through the skin in harmful amounts. Allergic reactions have been reported.

Ingestion:

May cause irritation of the digestive tract. Ingestion of thiocyanates may cause disorientation, weakness, low blood pressure, confusion, psychotic behavior, muscular spasms, convulsions, and death.



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Inhalation:

May cause respiratory tract irritation. May be harmful if inhaled.

Chronic:

Thiocyanates used in drug therapy have caused nervous system effects such as fine motor weakness of the arms and legs. Elevated levels of thiocyanate in the blood will inhibit the uptake of iodine by the thyroid gland resulting in thyroid effects. Prolonged absorption of thiocyanates may produce various skin eruptions, running nose, dizziness, cramps, nausea and vomiting.

Section 4 - First Aid Measures

Eyes:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

Skin:

In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:

Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician:

Treat symptomatically and supportively.

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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:

Use extinguishing media most appropriate for the surrounding fire.

Autoignition Temperature:

Not available.

Flash Point:

Not available.

NFPA Rating:

H-2; F-0; I-0

Explosion Limits:

Lower: n/a Upper: n/a

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.



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Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Avoid runoff into storm sewers and ditches that lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid breathing dust.

Storage:

Store in a cool, dry, well-ventilated area away from incompatible substances. 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 adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Potassium thiocyanate	none listed	none listed	5 mg/m ³ TWA (listed under Cyanide anion)

OSHA Vacated PELs:

Potassium thiocyanate: No OSHA Vacated PELs are listed for this chemical.

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: White
Odor: Odorless



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pH:	Neutral in water
Vapor Pressure:	Not available
Vapor Density:	Not available
Evaporation Rate:	Not available
Viscosity:	Not available
Boiling Point:	Decomposes
Freezing/Melting Point:	287° C
Decomposition Temperature:	Not available
Solubility in water:	139 g/100mL (21 C)
Specific Gravity/Density:	>1.0
Molecular Formula:	NaSCN
Molecular Weight:	81.06

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures. May decompose when exposed to light.

Conditions to Avoid:

Light, dust generation, moisture, excess heat.

Incompatibilities with Other Materials:

Acids, bases, alcohols, amines, ammonia, amides, glycols.

Hazardous Decomposition Products:

Hydrogen cyanide, oxides of nitrogen, oxides of sulfur, cyanide fumes.

Hazardous Polymerization:

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 540-72-7: XL2275000

LD50/LC50:

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Oral, mouse: LD50 = 362 mg/kg;

Oral, mouse: LD50 = 360 mg/kg;

Oral, mouse: LD50 = 809 mg/kg;

Oral, rat: LD50 = 764 mg/kg

Oral, rat: LD50 = 1180 mg/kg;

Oral, rat: LD50 = 232 mg/kg;

Oral, rat: LD50 = 837 mg/kg

Data on potassium thiocyanate, a very similar chemical: 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:

CAS# 540-72-7: Not listed by ACGIH, IARC, NTP, or California Prop 65.

Epidemiology:

No information found



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Teratogenicity:

No information found

Reproductive:

See actual entry in RTECS for complete information.

Mutagenicity:

No information found

Neurotoxicity:

No information found

Section 12 - Ecological Information

No information found.

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Not regulated

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

US Federal**TSCA:**

CAS# 540-72-7 is listed on the TSCA inventory.

SARA Reportable Quantities (RQ):

None of the chemicals in this material have an RQ.

CERCLA/SARA Section 313:

None of the components are on this list.

OSHA - Highly Hazardous:

None of the components are on this list.

US State**State Right to Know:**

CAS# 540-72-7 can be found on the following state right to know lists: California, (listed as Cyanides, inorganic salts), New Jersey, (listed as Cyanide anion), New Jersey, (listed as Cyanides, inorganic salts), Pennsylvania, (listed as Cyanide anion), Massachusetts, (listed as Cyanide anion).

California Regulations:

None.



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European/International Regulations

Canadian DSL/NDSL:

CAS# 540-72-7 is listed on Canada's DSL List.

Canada Ingredient Disclosure List:

CAS# 540-72-7 (listed as Cyanides, inorganic salts) is listed on the Canadian Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: May 25, 2007

Revision Date: May 30, 2007

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