

Creation Date 22-Dec-2009

Revision Date 05-Dec-2011

Revision Number 2

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

**Product Identifier**

**Product Description:**

**Sodium thiocyanate**

**Cat No.**

**446290000; 446290010; 446292500**

**Synonyms**

Sodium rhodanate; Sodium sulfocyanate; Thiocyanic acid sodium salt; Sodium isothiocyanate

**Relevant identified uses of the substance or mixture and uses advised against**

**Recommended Use**

Laboratory chemicals

**Uses advised against**

No Information available

**Details of the supplier of the safety data sheet**

**Company**

Acros Organics BVBA  
Janssen Pharmaceuticaaan 3a  
2440 Geel, Belgium

**E-mail address**

begel.sdsdesk@thermofisher.com

**Emergency Telephone Number**

For information in the US, call: 001-800-ACROS-01

For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99

Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300

CHEMTREC Phone Number, Europe: 001-703-527-3887

## SECTION 2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

**REGULATION (EC) No 1272/2008**

Acute oral toxicity	Category 4
Acute dermal toxicity	Category 4
Acute Inhalation Toxicity - Vapors	Category 4
Chronic aquatic toxicity	Category 3

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

*For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16*

**Symbol(s)**

Xn - Harmful

**R-phrases**

R32 - Contact with acids liberates very toxic gas

**Risk Combination Phrases**

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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**SECTION 2. HAZARDS IDENTIFICATION**

Label Elements



Signal Word

Warning

**Hazard Statements**

H312 - Harmful in contact with skin  
 H412 - Harmful to aquatic life with long lasting effects  
 H302 - Harmful if swallowed  
 H332 - Harmful if inhaled  
 EUH032 - Contact with acids liberates very toxic gas

**Precautionary Statements - EU (§28, 1272/2008)**

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection  
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
 P273 - Avoid release to the environment  
 P233 - Keep container tightly closed  
 P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell  
 P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

**Other Hazards**

No information available.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.
Sodium thiocyanate 540-72-7	EEC No. 208-754-4	>95	540-72-7	Xn; R20/21/22 R32 R52-53	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Aquatic Chronic 3 (H412) EUH032	-

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

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**SECTION 4. FIRST AID MEASURES****Description of 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.

**Ingestion**

Do not induce vomiting. Call a physician or Poison Control Center immediately.

**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.

**Notes to Physician**

Treat symptomatically

**SECTION 5. FIRE-FIGHTING MEASURES****Extinguishing media****Suitable Extinguishing Media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Extinguishing media which must not be used for safety reasons**

No information available.

**Special hazards arising from the substance or mixture**

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

**Advice for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

**SECTION 6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes and clothing.

**Environmental precautions**

Should not be released into the environment.

**Methods and material for containment and cleaning up**

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

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**SECTION 7. HANDLING AND STORAGE**
**Precautions for Safe Handling**

Use only under a chemical fume hood. Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Keep away from acids.

**Conditions for safe storage, including any incompatibilities**

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from light. Keep away from acids.

**Specific End Uses**
**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**
**Control parameters**
**Exposure limits**
**Component**

Sodium thiocyanate

European Union	The United Kingdom	France	Belgium	Spain
	STEL: 15 mg/m <sup>3</sup> 15 min TWA: 5 mg/m <sup>3</sup> 8 hr Skin	VME: 5 mg/m <sup>3</sup> 8 heures. CN Skin		

**Component**

Sodium thiocyanate

Italy	Germany	Portugal	The Netherlands	Finland
	MAK: 2 mg/m <sup>3</sup> 8 Stunden. inhalable fraction Skin Peak: 2 mg/m <sup>3</sup>			

**Component**

Sodium thiocyanate

Austria	Denmark	Switzerland	Poland	Norway
				TWA: 5 mg/m <sup>3</sup> 8 timer Skin

**Component**

Sodium thiocyanate

Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
		Skin		

**Component**

Sodium thiocyanate

Latvia	Lithuania	Luxembourg	Malta	Romania
TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>			

**Component**

Sodium thiocyanate

Russia - TWA	Slovak Republic	Slovenia	Sweden	Turkey
MAC: 10 mg/m <sup>3</sup>				

**Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

**Derived No Effect Level (DNEL)**

No information available.

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**Predicted No Effect Concentration (PNEC)** No information available.

**Exposure controls**
**Engineering Measures** Use only under a chemical fume hood Ensure adequate ventilation, especially in confined areas Ensure that eyewash stations and safety showers are close to the workstation location

**Personal protective equipment**

<b>Eye Protection</b>	Safety glasses with side-shields
<b>Hand Protection</b>	Protective gloves
<b>Skin and body protection</b>	Long sleeved clothing
<b>Respiratory Protection</b>	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice

**Environmental exposure controls** No information available.

<b>SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES</b>
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<b>Physical State</b>	Solid
<b>Appearance</b>	White
<b>odor</b>	odorless
<b>pH</b>	5.5-7.5 (@ 20 ) 5% aq.sol. 20°C
<b>Boiling Point/Range</b>	No information available.
<b>Melting Point/Range</b>	287°C / 548.6°F
<b>Flash Point</b>	No information available.
<b>Autoignition Temperature</b>	No information available.
<b>Evaporation Rate</b>	No information available.
<b>Water Solubility</b>	1390 g/L (21°C)
<b>Specific Gravity</b>	> 1.0
<b>Molecular Formula</b>	C N Na S
<b>Molecular Weight</b>	81.07

<b>SECTION 10. STABILITY AND REACTIVITY</b>
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**Reactivity**
**Chemical Stability**

Hygroscopic. Light sensitive.

**Possibility of Hazardous Reactions**

<b>Hazardous Polymerization</b>	No information available
<b>Hazardous Reactions .</b>	Contact with acids liberates very toxic gas..

**Conditions to Avoid**

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

**Incompatible Materials**



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Strong oxidizing agents, Acids, Strong bases.

**Hazardous Decomposition Products**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>). Sulfur oxides.

**SECTION 11. TOXICOLOGICAL INFORMATION**

**Information on Toxicological Effects**

**Acute Toxicity**

**Component Information**

<b>Component</b>	<b>LD50 Oral</b>	<b>LD50 Dermal</b>	<b>LC50 Inhalation</b>
Sodium thiocyanate	764 mg/kg ( Rat )		

**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.  
**Target Organs** Central nervous system (CNS) Blood Liver Thyroid  
**Other Adverse Effects** The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information  
**Endocrine Disruptor Information** None known

**SECTION 12. ECOLOGICAL INFORMATION**

**Toxicity**

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

**Persistence and degradability**

No information available



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**Bioaccumulative potential**

No information available.

**Mobility in soil**

No information available.

**Results of PBT and vPvB assessment**

**Other adverse effects**

No information available

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Waste from Residues / Unused Products**

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

**Contaminated Packaging**

Empty containers should be taken to local recyclers for disposal

**SECTION 14. TRANSPORT INFORMATION**

**IMDG/IMO**

Not regulated

**ADR**

Not regulated

**IATA**

Not regulated

**SECTION 15. REGULATORY INFORMATION**

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**International Inventories**

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Sodium thiocyanate	208-754-4	-		X	X	-	X	X	X	X	X

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

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**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**CHINA** - China Inventory of Existing Chemical Substances

**AICS** - Inventory of Chemical Substances

**KECL** - Existing and Evaluated Chemical Substances

**Chemical Safety Assessment****SECTION 16. OTHER INFORMATION****Full text of R-phrases referred to under sections 2 and 3**

R32 - Contact with acids liberates very toxic gas

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

**Revision Date** 05-Dec-2011

**Revision Summary** Not applicable

**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

**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 Safety Data Sheet**