

SODIUM THIOCYANATE**SECTION 1. Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier

- * Chemical description : Sodium thiocyanate ; Sodium sulfocyanate ; Sodium rhodanide ; Thiocyanic acid, sodium salt .
- Type of product : Pure product .
- * Reach registration number : 01-2119543700-47

1.2. Relevant identified uses of the substance or mixture and uses advised against

- * Identified use(s) : See table on the front page of the annex.
- * Use(s) advised against : This product is not recommended for any industrial, professional or consumer use other than identified in table on the front page of the annex.

1.3. Details of the supplier of the safety data sheet

- * Company identification : **Deep South Chemical, Inc.**
229 Millstone Road, Broussard, LA 70518
TEL: 337-837-9931 FAX: 337-837-9565
E-MAIL: info@deep-south-chemical.com - Website: www.deep-south-chemical.com

1.4. Emergency telephone number

- * Emergency phone number Chemtrec 1-800-424-9300

The Netherlands : National Poisoning Information Center - Bilthoven
TEL: +31(0)30/274.88.88 (Only for the purpose of informing medical personnel in cases of acute intoxications)

SECTION 2. Hazards identification2.1. Classification of the substance or mixtureClassification according to Directive 67/548/EEC or 1999/45/EC

- * Harmful (Xn; R20/21/22)
Other (-; R32)
Irritant (Xi; R36)
Dangerous for the environment (-; R52/53)

Classification according to Regulation (EC) No 1272/2008

- * Acute toxicity, oral - Category 4 - Warning (Acute Tox. 4, oral; H302)
Acute toxicity, dermal - Category 4 - Warning (Acute Tox. 4, dermal; H312)
Eye irritation - Category 2 - Warning (Eye Irrit. 2; H319)
Acute toxicity, inhalation - Category 4 - Warning (Acute Tox. 4, inhalation; H332)
Hazardous to the aquatic environment - Chronic hazard - Category 3 (Aquatic Chronic 3; H412)

2.2. Label elementsLabel in accordance with Regulation (EC) No 1272/2008

- * • Dangerous ingredient(s) : Thiocyanic acid, sodium salt
- * • Hazard pictogram(s)



- Signal word : Warning
- * • Hazard statements : H302 - Harmful if swallowed. H312 - Harmful in contact with skin. H319 - Causes serious eye irritation. H332 - Harmful if inhaled. H412 - Harmful to aquatic life with long lasting effects. EUH032 - Contact with acids liberates very toxic gas.

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SECTION 2. Hazards identification (continued)

- * • Precautionary statements
 - * - Prevention : P261 - Avoid breathing dust. P270 - Do not eat, drink or smoke when using this product. P273 - Avoid release to the environment. P280 - Wear protective gloves, protective clothing, eye protection, face protection.
 - * - Response : P308+P313 - If exposed or concerned : get medical advice.
- 2.3. Other hazards
- * Physical/chemical hazards : The substance decomposes by heating and under influence of light in formation of toxic vapours.
 - * Hazards for the health : This product evaporates practically not at 20°C; as a powder during spraying, there will be soon a dangerous concentration in the air.
 - * Hazards for the environment : No additional hazard. This product is no substance or contains no PBT or vPvB (in accordance with Annex XIII).
 - * Hazards for the safety : No significant danger.

SECTION 3. Composition/information on ingredients

3.1. Substances

Name component(s)	Weight %	CAS nr	EINECS nr	Index nr	Reach nr	CLASSIFICATION
* Thiocyanic acid, sodium salt	: > 99 %	540-72-7	208-754-4	615-004-00-3	01-2119543700-47	Xn; R20/21/22 R32 Xi; R36 R52/53 ----- Acute Tox. 4 (oral); H302 Acute Tox. 4 (skin); H312 Eye Irrit. 2; H319 Acute Tox. 4 (inhal); H332 Aquatic Chronic 3; H412 Acute Tox.; EUH032

* The full text of the R-phrases and (EU)H-statements is in section 16.

Note A (Regulation (EC) No 1272/2008) applies to the product or one or more of its components.

SECTION 4. First aid measures

4.1. Description of first aid measures

- General : In case of doubt or persistent symptoms, call a physician.
Never give anything by mouth to an unconscious person.
- First Aid Measures
- Inhalation : Remove victim into fresh air.
Allow the affected person to rest in semi-sitting position.
If not breathing, give artificial respiration.
Consult a doctor.
- Skin Contact : Remove contaminated clothing.
Rinse skin immediately with plenty of water. (shower if necessary).
Consult doctor if irritation develops.
- Eye Contact : Rinse immediately thoroughly and long (at least 15 min.) with plenty of water.
Remove contact lenses.
Consult eye doctor.
- Ingestion : DO NOT INDUCE VOMITING. Rinse mouth with water.
Give victim plenty of water to drink.
Seek medical attention immediately.

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SECTION 4. First aid measures (continued)

4.2. Most important symptoms and effects, both acute and delayed

- * See section 11.

4.3. Indication of any immediate medical attention and special treatment needed

- * For specialist advice doctors should contact the NVCi or the Belgian Poison center.

SECTION 5. Firefighting measures

5.1. Extinguishing media

Extinguishing Media

- Suitable : In case of nearby fire, use of all extinguishing media allowed.
- * - Insuitable : Not known .

5.2. Special hazards arising from the substance or mixture

Special Exposure Hazards : Fire may liberate toxic vapours. (Sulfur oxides , Cyanides , Nitrogen dioxide)

5.3. Advice for firefighters

- * Special Protective Equipment for Firefighters : Use self-contained breathing apparatus and wear protective clothes when in close proximity to fire.
- Special Procedures : Apply water spray or fog to cool nearby equipment. Avoid fire-fighting water to enter environment.

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions : Evacuate all personnel immediately and ventilate area.
Avoid breathing the product and contact with eyes and skin.
Wear recommended personal protective equipment. (See section 8)

6.2. Environmental precautions

Environmental Precautions : Prevent entry of product in public water, sewers or soil.
Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for Cleaning Up : Collect the spillage in closable, suitable disposal containers.
Sweep or shovel spills.
Residue is to be washed down with plenty of water.

6.4. Reference to other sections

- * For personal protection, see section 8.
For the removal of the waste product, see section 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

- * Handling : AVOID DUST CREATION ! Ventilate area.
Avoid breathing the product and contact with eyes and skin.
Wear recommended personal protective equipment. (See section 8)
When using, do not eat, drink or smoke.
Wash hands before and after working with the product.
Emergency eye wash fountains and showers should be available in the immediate vicinity of any potential exposure.

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SECTION 7. Handling and storage (continued)

7.2. Conditions for safe storage, including any incompatibilities

- * Storage : Keep only in the original, safely locked container in a well ventilated, dry and dark place.
All dangerous products should be placed on a drip tray or should be barreled.
Keep away from : Strong oxidizing agents , Strong acids .
- * Packaging Material : Paper .
- * Insuitable Packaging Material : Metals .

7.3. Specific end use(s)

- * For identified uses, see subsection 1.2 and/or exposure scenarios.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

- Occupational Exposure Limits : Not established.
- * Biological limit values : They will be included when available.
- * DNELs :
 - Thiocyanic acid, sodium salt : Worker, acute - systemic effects, inhalation : 15 mg/m³
 - Thiocyanic acid, sodium salt : Worker, long-term - systemic effects, inhalation : 3 mg/m³
 - Thiocyanic acid, sodium salt : Worker, long-term - systemic effects, dermal : 1,7 mg/kg bw/ day
 - Thiocyanic acid, sodium salt : Consumer, long-term - systemic effects, inhalation : 1,1 mg/m³
 - Thiocyanic acid, sodium salt : Consumer, long-term - systemic effects, dermal : 1, 2 mg/kg bw/ day
 - Thiocyanic acid, sodium salt : Consumer, long-term - systemic effects, oral : 0,3 mg/kg bw/ day
- * PNECs :
 - Thiocyanic acid, sodium salt : Fresh water : 0,095 mg/l
 - Thiocyanic acid, sodium salt : Marine water : 0,0095 mg/l
 - Thiocyanic acid, sodium salt : Fresh water sediment : 0,543 mg/kg
 - Thiocyanic acid, sodium salt : Marine water sediment : 0,0543 mg/kg
 - Thiocyanic acid, sodium salt : Soil : 6,336 mg/kg
 - Thiocyanic acid, sodium salt : Intermittent release : 0,0272 mg/l
 - Thiocyanic acid, sodium salt : Sewage treatment plant : 30 mg/l

8.2. Exposure controls

- * Engineering Measures : Ventilation , Local exhaust .
- Personal Protection Equipment
 - Respiratory protection : Respiratory protection equipment (Filter type P2).
 - Skin protection : Suitable protective clothing .
- * - Hand protection : Suitable material for safety gloves (EN 374):
The suitability of the gloves and the breakthrough time for a specific workplace should be discussed with the producers of the protective gloves.
 - material : Nitril rubber
 - thickness : 0,11 mm
 - breakthrough time : > 8 h
- * - Eye/Face protection : Dust respirator .
- * Environmental exposure controls : See sections 6, 7, 12 and 13.

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SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

- * Physical State (20°C) : Solid .
- * Form/Colour : White .
- Odour : Odourless .
- * Odour threshold : No data available.
- * pH value : 5 - 9 (5% Sol. in water)
- * Melting/Freezing point : 308 °C
- Boiling Point/Range (1013 hPa) : Not established.
- Flash point : Not applicable.
- * Fire hazard : Not applicable.
- * Evaporation rate : Not applicable.
- Explosion limits in air : Not applicable.
- * Vapour pressure : Not applicable.
- * Relative vapour density (air=1) : Not applicable.
- * Relative density of saturated vapour/air mixture (air=1) : Not applicable.
- * Relative density (water=1) : 1,726
- Bulk density : 700 - 800 kg/m³
- * Solubility in water (20°C) : 1250 g/l
- Soluble in : Ethanol , Methanol , Acetone .
- * Log P Octanol/Water (20°C) : -2,52 (estimated)
- Auto-ignition temperature : Not applicable.
- * Minimum ignition energy : Not applicable.
- Decomposition temperature : > 368 °C
- * Viscosity : Not applicable.
- * Explosive properties : No chemical groups associated with explosive properties .
- * Oxidizing properties : No chemical groups associated with oxidizing properties .

9.2. Other information

- * Others : Hygroscopic .

SECTION 10. Stability and reactivity

10.1. Reactivity

- * Reactivity : Reacts with : Strong oxidizing agents , Strong acids .

10.2. Chemical stability

- Stability : Stable at normal circumstances .

10.3. Possibility of hazardous reactions

- * Hazardous reactions : Contact with acids liberates very toxic gas.

10.4. Conditions to avoid

- Conditions to avoid : High temperatures , Light .

10.5. Incompatible materials

- * Materials to avoid : Strong oxidizing agents , Strong acids .

10.6. Hazardous decomposition products

- Hazardous Decomposition Products : Sulfur oxides , Cyanides , Nitrogen dioxide .

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SECTION 11. Toxicological information

11.1. Information on toxicological effects

- Acute toxicity
- Inhalation : Harmful by inhalation.
Inhalation of vapour or nebulized product may cause lung oedema.
Symptoms include: Cough , Shortness of breath .
 - * - Skin contact : Harmful in contact with skin.
Symptoms include: Redness .
• Thiocyanic acid, sodium salt : LD50 (Rat, dermal) : >2000 mg/kg (OECD Guideline 402)
 - * - Ingestion : Harmful if swallowed.
Symptoms include: Headache , Nausea , Vomiting , Weakness , Dizziness .
• Thiocyanic acid, sodium salt : LD50 (Quail, oral) : 508 mg/kg (OECD Guideline 401)
 - * Skin corrosion/irritation : Not irritant .
 - * Serious eye damage/irritation : Causes serious eye irritation.
 - * Aspiration hazard : Inhalable particles are not available and will also not be formed during handling and use of the substance.
 - * Respiratory or skin sensitisation : Not sensitive .
 - * Carcinogenicity : Not listed as carcinogenic .
 - * Mutagenicity : Not listed as mutagenic .
 - * Reproductive toxicity : Not listed for reproductive toxicity .
 - * Specific target organ toxicity - single exposure : To human : Listed not for organ toxicity .
For animals : No effects known.
 - * Specific target organ toxicity - repeated exposure : To human : Listed not for organ toxicity .
For animals : No effects known.

SECTION 12. Ecological information

12.1. Toxicity

- * Ecotoxicity : • Thiocyanic acid, sodium salt : LC50 (Fish, 96 h) : 69 mg/l (Oncorhynchus mykiss) (OECD Guideline 203)
• Thiocyanic acid, sodium salt : EC50 (Algae, 72 h) : >249,5 mg/l (OECD Guideline 201)
• Thiocyanic acid, sodium salt : EC50 (Daphnia magna, 48 h) : 3,79 mg/l (OECD Guideline 202)

12.2. Persistence and degradability

- * Persistence and degradability : • Thiocyanic acid, sodium salt : Persistence and degradability : Easily biologically degradable.

12.3. Bioaccumulative potential

- * Bioaccumulation : • Thiocyanic acid, sodium salt : Bioaccumulation : Low potential to bioaccumulate.

12.4. Mobility in soil

- * Mobility : • Thiocyanic acid, sodium salt : Mobility : Not applicable.

12.5. Results of PBT and vPvB assessment

- * Evaluation : • Thiocyanic acid, sodium salt : PBT/vPvB : No

12.6. Other adverse effects

- WGK class (DE) : 1 (Weak water pollutant).
- * Water damaging (NL) : No data available.

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SECTION 12. Ecological information (continued)

- * Decontamination exertion (NL) : No data available.
- * Photochemical ozone creation potential : No data available.
- * Ozone depletion potential : No data available.
- * Endocrine disrupting potential : No data available.
- * Global warming potential : No data available.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

- Waste from residues/Unused products : The product has to be destroyed according to national or local legislation, by a company specialised in handling hazardous waste products.
- * European list of waste products : XXXXXX - European waste product code. This code is assigned on the basis of the most current applications and can not be representative for pollutions which are arisen at the effective use of the product. The producer of the waste has to evaluate its process himself and has to grant the appropriate waste coding. See Decision 2001/118/EC.
- Removal contaminated packaging : Packing is to be used exclusively for the packing of this product. After use, empty and close the packing very carefully. In case of returned packing, the empty packing can be offered back to the supplier.

SECTION 14. Transport information

14.1. UN number

UN Number : -

14.2. UN proper shipping name

- ADR Name : -
- * ADN Name : -
- IMDG Name : -

14.3. Transport hazard classe(s)

Class : -

14.4. Packing group

Packaging Group : -

14.5. Environmental hazards

- * Environmentally hazard : -
- Marine pollutant : -

14.6. Special precautions for user

Danger number : -

Hazard Label(s) : -

EmS-N° : -

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- * Type ship : -
- * Pollution category : -

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SECTION 15. Regulatory information

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

- * Relevant EU Rule(s) : Decision 2001/118/EC of the Commission of 16 January 2001 amending Decision 2000/532/EC as regards the list of wastes
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (Reach)

15.2. Chemical Safety Assessment

- * A chemical safety assessment has been carried out for the material.

SECTION 16. Other information

- * This safety data sheet has been drawn up in accordance with Regulation (EU) No 453/2010. This safety data sheet is exclusively made for industrial/professional use.
- * Has changed compared to previous revision.
- * Changes : General revision .
- * Sources of used key data : The information contained herein is based on the present state of our knowledge (Producer(s) , Chemical cards , ...).
See also on the webaddress:
<http://apps.echa.europa.eu/registered/registered-sub.aspx#search>
- * R-phrase(s) : R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.
R32 - Contact with acids liberates very toxic gas.
R36 - Irritating to eyes.
R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- * (EU)H-statement(s) : H302 - Harmful if swallowed.
H312 - Harmful in contact with skin.
H319 - Causes serious eye irritation.
H332 - Harmful if inhaled.
H412 - Harmful to aquatic life with long lasting effects.
EUH032 - Contact with acids liberates very toxic gas.
- * List of abbreviations and acronyms : ADN (Accord européen relatif au transport international des marchandises Dangereuses par voie de Navigation interieur) : European agreement concerning the international carriage of dangerous goods by inland waterways
ADR (Accord européen relatif au transport international des marchandises Dangereuses par Route) : European agreement concerning the international carriage of dangerous goods by road
DNEL (Derived No Effect Level) : an estimated safe exposure level
EmS (Emergency Schedule) : the first code refers to the relevant fire schedule and the second code refers to the relevant spillage schedule
IMDG (International Maritime Dangerous Goods code)
NVCI : National Poisoning Information Center
OECD : Organisation for Economic Cooperation and Development
PBT : persistent, bioaccumulative and toxic
PNEC (Predicted No Effect Concentration) : concentration below which exposure to a substance is not expected to cause adverse effects
REACH : Registration, Evaluation, Authorisation and restriction of Chemicals
vPvB : very persistent and very bioaccumulative
WGK (Wassergefährdungsklasse) : a German classification of substances that indicate the environmental hazard for surface water

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This information is to our knowledge correct and complete on the date of issue of this safety data sheet. The information only concerns the product and does not give any guarantee for the quality and the completeness of the properties of the product, or in case of mixing or using in any other process. It remains the responsibility of the user to assure himself that the information is suitable and complete concerning the special use he makes of the product.
Deep South Chemical, Inc. denies all responsibility for loss or damage resulting from the use of these data.

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