

## Material Safety Data Sheet

### Sodium thiocyanate

#### Section 1 – PRODUCT AND COMPANY IDENTIFICATION

<b>1. Product Identifier</b>	Sodium thiocyanate; Sodium sulficyanate
<b>2. Recommended Use &amp; Uses advised against</b>	Uses for Laboratory and R&D only
<b>3. Information of Supplier</b>	SAMCHUN PURE CHEMICAL CO.,LTD ADDRESS; (Mogok-dong) 117, Sandan-ro 16Beon-gil, Pyeongtaek-si, Gyeonggi-do, Korea Emergency Phone; 82-31-668-0700/3 Department; Safety & Environment dep. Web site; <a href="http://www.samchun.com">http://www.samchun.com</a>

#### Section 2 – HAZARDS and DANGER IDENTIFICATION

<b>1.GHS Classification· Identification</b>	Acute toxic(Oral)	Category4
	Chronic Aquatic Toxicity	Category3

#### 2. Label and Mark including Precautionary Statement

##### ◦Label elements



##### ◦Signal word

H302 Harmful if swallowed  
H412 Harmful to aquatic life with long lasting effects  
P264 Wash ... thoroughly after handling.

##### ◦Hazard · Danger statement

P270 Do not eat, drink or smoke when using this product.  
P273 Avoid release to the environment

##### ◦Precautionary statement

**Precaution** P330 Rinse mouth.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

**Measures** N/A

**Storage** N/A

**Dispose** P501 Dispose of contents/container under related law and regulations

#### 3. Other Hazard-Risk which are not included in the classification criteria

NFPA index(0~4steps) : Health=3, Fire=0, Reaction=1

#### Section 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Name	Other Name	CAS No.	Content (%)
Sodium thiocyanate	Sodium sulficyanate	540-72-7	100

#### Section 4 – FIRST AID MEASURES

<b>1. Eye Contact</b>	Rinse with plenty of water for at least 15minutes and get medical attention immediately.
<b>2. Skin Contact</b>	Take off contaminated cloths and shoes immediately, wash with plenty of water and soap for at least 15minutes.
<b>3. Inhalation</b>	Move victim to fresh air. If breathing is difficult, give artificial respiration and get medical attention immediately.

<b>4. Ingestion</b>	Do not induce vomiting. Get medical advice/attention immediately.
<b>5. Immediate medical attention and Notes for physician</b>	Keep the medical personnel aware of the materials involved and take protective action.

**Section 5 – FIRE-FIGHT MEASURES**

<b>1. Suitable extinguish media</b>	Powder extinguisher, foam extinguisher, water, carbon dioxide Inappropriate Extinguishing Media: N/A
<b>2. Special hazards arising from the substance</b>	Thermal decomposition products: cyanide, nitrogen oxides, sulfur oxides, sodium oxide
<b>3. Special protective equipment and Precautions for fire-fighters</b>	Move containers from fire area if you can do it without risk. When extinguishing a fire, be sure to wear personal protective equipment. If it is not possible to extinguish the fire, withdraw immediately. Keep containers cool by spraying with water for a long time, even after the fire is out. Isolate hazardous areas and deny access to people.

**Section 6 – ACCIDENTAL RELEASE MEASURES**

<b>1. Personal precautions and Emergency procedures</b>	Do not touch spilled material. Avoid inhalation and skin contact. In case of confined space, wear air respirator and ventilate and remove all sources of ignition.
<b>2. Environmental precautions</b>	Minimize leak/spill, collect and keep leak/spill in container
<b>3. Methods and material for containment and cleaning up</b>	Remove residue with high-efficient cleaner

**Section 7 – HANDLING AND STORAGE**

<b>1. Precautions for safe Handling</b>	Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. All containers should be grounded.
<b>2. Conditions for safe storage</b>	Keep container tightly closed in a dry, cool and well-ventilated place. Keep away from incompatible materials. Protect from light

**Section 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION**

<b>1. Occupational exposure limit, biological exposure limit</b>	
National law of Safety management of N/A	
<b>2. Appropriate Engineering controls</b>	Ensure compliance with applicable exposure limits and operate local exhaust ventilation when working.
<b>3. Personal protective equipment</b>	
◦Respiratory protection	Because it is concerned about the harmfulness of human body due to chemical substances, it is recommended to wear respiratory protective equipment with dust mask or dust filter in consideration of physical and chemical characteristics when handling. Respiratory protection should be certified by the Health and Safety Authority. It is concerned about the harmfulness of the human body depending on the working environment, it should wear respirator, air-purifying respirator
◦Eye-protection	Wear safety glasses when handling as they may cause human health hazards due to chemicals. Install eye wash facilities and emergency eyewash stations near chemical handling sites
◦Hand protection	Wear safety gloves when handling, as it is likely to harm human health due to chemicals
◦Skin and body protection	Wear chemical protective clothing when handling, as it is likely to harm human health due to chemicals

**Section 9 – PHYSICAL AND CHEMICAL PROPERTIES**

<b>1. Physical state and color</b>	Solid(White)	<b>2. Odor</b>	Odorless
<b>3. threshold</b>	N/A	<b>4. pH</b>	5.5~7.5(5% solution@20°C)

<b>5. Melting/Freezing point</b>	287°C	<b>6. Boiling point/range</b>	N/A
<b>7. Flashing point</b>	N/A	<b>8. Evaporation speed</b>	N/A
<b>9. Flammability(solid,gas)</b>	N/A	<b>10. Flash or Explosion limit upper / lower</b>	N/A
<b>11. Vapor pressure</b>	N/A	<b>12. Solubility</b>	1390g/l(21°C)
<b>13. Vapor density</b>	N/A	<b>14. Gravity</b>	> 1.0
<b>15. n-octanol-water Partition coefficient</b>	N/A	<b>16. Self ignition temp(°C)</b>	N/A
<b>17. Cracking temp(°C)</b>	368°C	<b>18. Viscosity</b>	N/A
<b>19. Molecular Weight</b>	81.06		

### Section 10 – STABILITY AND REACTIVITY

<b>1. Chemical stability and Possibility of Hazardous Reactions</b>	Stable under normal temp. and pressure
<b>2. Conditions to Avoid</b>	Keep container tightly closed in a dry, cool and well-ventilated place. Keep away from incompatible materials. Protect from light...
<b>3. Incompatible Materials</b>	Oxidizer, acid, base
<b>4. Hazardous Decomposition Products</b>	Thermal decomposition products: cyanide, nitrogen oxides, sulfur oxides, sodium oxide

### Section 11 – TOXICOLOGICAL INFORMATION

#### 1. Information on the likely routes of exposure.

That the containers can explode when heated

Some may burn, but not easily ignite

Non-flammable, the substance itself is not burned but decomposes on heating and may cause corrosive / toxic fumes

May cause irritating, corrosive and toxic gases in case of fire

#### 2. Health hazard information

◦Acute toxic	Oral : LD50 764 mg/kg Rat Skin : N/A Inhalation : N/A
◦Serious skin corrosive / irritation	May cause skin irritation
◦Serious eye damage / irritation	May cause eye irritation
◦Respiratory sensitization	N/A
◦Skin sensitization	N/A
◦Carcinogenicity	N/A
◦Germ cell Mutagenicity	N/A
◦Reproductive toxic	N/A
◦Specific target organ toxicity (single exposure )	N/A
◦Specific target organ toxicity (repeated exposure )	May cause central nervous system depression
◦Aspiration hazard	N/A

### Section 12 – ECOLOGICAL INFORMATION

<b>1. Aquatic and Terrestrial eco toxicity</b>	Fish toxicity : LC50 87 mg/l 96 hr Invertebrate toxicity : N/A Sea algae : N/A
<b>2. Persistence and degradability</b>	Persistence : log Kow -2.52 Degradability : N/A

<b>3.Bioaccumulative potential</b>	Concentrations : N/A Bioaccumulative : 78 (%) 28 day (easily decomposed / MITI-I (OECD TG 301C))
<b>4.Mobility in soil</b>	N/A
<b>5.Other adverse effects</b>	Harmful to aquatic organisms due to long-term effects.

#### Section 13 – Disposable considerations

<b>1.Waste methods</b>	Dispose in accordance with local regulations.
<b>2.Waste warning</b>	Dispose prohibited substances and waste separately from others.

#### Section 14 – TRANSPORT INFORMATION

<b>1. UN No.</b>	Non-described
<b>2.Proper shipping Name</b>	Non-described
<b>3.Hazard class</b>	Non-described
<b>4.Packing group</b>	Non-described
<b>5.Marine pollutant</b>	N/A
<b>6.Particular safety Measures for transportation</b>	Non-described

#### Section 15 – REGULATORY INFORMATION

<b>1.Occupation safety and health acts</b>	Non-described
<b>2. Chemical Substances Control Act</b>	Non-described
<b>3. National law of Safety management of hazardous material</b>	Non-described
<b>4.National law of management of Wastes</b>	Designated Waste
<b>5.Other domestic and foreign law</b>	Non-described

#### Section 16 – OTHER INFORMATION

<b>1. Material source</b>	A chemical information MSDS Safety and Health Agency National Institute of Environmental Research Chemical Information Systems Korea Industrial Technology National Fire Hazardous Materials Information System
<b>1. The 1<sup>st</sup> edition</b>	2002.07.30
<b>2. Revision and The final revision</b>	5 / 2019.01.03
<b>. Other references</b>	

\* 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.