



**Neutron®** Pharmachemical Co.  
Manufacturer of Laboratory Chemical & Pharmaceutical Materials

# Rhodanine

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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Version: 1.1

### SECTION 1: Identification

#### 1.1. Identification

Product form : Substance  
Substance name : Rhodanine  
Chemical name : 2-Thioxo-4-thiazolidinone  
CAS-No. : 141-84-4  
Product code : 6.7080  
Formula : C<sub>3</sub>H<sub>3</sub>NOS<sub>2</sub>

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : For laboratory and manufacturing use only.  
Recommended use : Laboratory chemicals  
Restrictions on use : Not for food, drug or household use

#### 1.3. Supplier

NEUTRON PHARMACHEMICAL CO  
98, 9th Floor, Borjsaz Building, Azadi Ave, Tehran, Iran.  
T 021-66906732-3 - F 021-66581408  
info@neutronco.com www.neutronco.com

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC: 125

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Acute toxicity (oral) H302 Harmful if swallowed  
Category 4  
Serious eye damage/eye irritation Category 1 H318 Causes serious eye damage  
Full text of H statements : see section 16

#### 2.2. GHS Label elements, including precautionary statements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Danger  
Hazard statements (GHS-US) : H302 - Harmful if swallowed  
H318 - Causes serious eye damage  
Precautionary statements (GHS-US) : P264 - Wash exposed skin thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P280 - Wear protective gloves, eye protection.  
P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P310 - Immediately call a poison center or doctor/physician.  
P330 - If swallowed, rinse mouth  
P501 - Dispose of contents/container to comply with local, state and federal regulations

#### 2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : None under normal conditions.

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

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### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	GHS-US classification
Rhodanine (Main constituent)	(CAS-No.) 141-84-4	100	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318

Full text of hazard classes and H-statements : see section 16

#### 3.2. Mixtures

Not applicable

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER or doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects after eye contact : Causes serious eye damage.
- Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

#### 4.3. Immediate medical attention and special treatment, if necessary

Obtain medical assistance.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Specific hazards arising from the chemical

No additional information available

#### 5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- Protective equipment : Dust mask. Safety glasses. Gloves.
- Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash exposed skin thoroughly after handling.

#### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep container closed when not in use.
- Incompatible products : Strong oxidizers.
- Incompatible materials : Sources of ignition. Direct sunlight.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Appropriate engineering controls

- Appropriate engineering controls : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

#### 8.3. Individual protection measures/Personal protective equipment

##### Personal protective equipment:

Gloves. Safety glasses.



##### Hand protection:

Wear protective gloves.

##### Eye protection:

Chemical goggles or safety glasses

##### Respiratory protection:

Respiratory protection not required in normal conditions

##### Other information:

Do not eat, drink or smoke during use.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

- Physical state : Solid
- Appearance : Powder.
- Color : light yellow
- Odor : None.
- Odor threshold : No data available
- pH : No data available
- Melting point : 166 - 171 °C
- Freezing point : No data available
- Boiling point : No data available
- Flash point : No data available
- Relative evaporation rate (butyl acetate=1) : No data available

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Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 0.868 g/cm <sup>3</sup>
Solubility	: Soluble in water. Water: 2.25 g/l
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong oxidizers.

### 10.6. Hazardous decomposition products

Nitrogen oxides. Carbon monoxide. Carbon dioxide. Sulfur compounds.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Likely routes of exposure : Inhalation; Skin and eye contact

Acute toxicity : Oral: Harmful if swallowed.

Rhodanine (141-84-4)	
LD50 oral rat	320 mg/kg
ATE US (oral)	320 mg/kg body weight

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified

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Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met. Harmful if swallowed.

Symptoms/effects after eye contact : Causes serious eye damage.

Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

### SECTION 12: Ecological information

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

##### Rhodanine (141-84-4)

Persistence and degradability	Not established.
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#### 12.3. Bioaccumulative potential

##### Rhodanine (141-84-4)

Bioaccumulative potential	Not established.
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#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

Other information : Avoid release to the environment.

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to comply with local, state and federal regulations.

Ecology - waste materials : Avoid release to the environment.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT

Not regulated

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### Rhodanine (141-84-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
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All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

#### 15.2. International regulations

##### CANADA

##### Rhodanine (141-84-4)

Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations

No additional information available

#### National regulations

##### Rhodanine (141-84-4)

Listed on the Canadian IDL (Ingredient Disclosure List)

#### 15.3. US State regulations

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California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

### SECTION 16: Other information

Revision date : 02/14/2018

Other information : None.

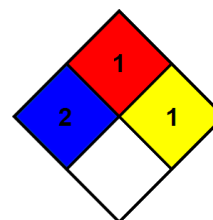
Full text of H-phrases: see section 16:

H302	Harmful if swallowed
H318	Causes serious eye damage

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity : 1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.



Hazard Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical : 1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

Personal protection : E

E - Safety glasses, Gloves, Dust respirator

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