

## SAFETY DATA SHEET

Creation Date 19-October-2010

Revision Date 23-January-2018

Revision Number 4

### 1. Identification

**Product Name** Diethyldithiocarbamic acid, silver salt

**Cat No. :** AC114290000; AC114290050; AC114290250; AC114291000

**CAS-No** 1470-61-7  
**Synonyms** Silver diethyldithiocarbamate

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Not for food, drug, pesticide or biocidal product use

#### Details of the supplier of the safety data sheet

##### Company

##### **Importer/Distributor**

Fisher Scientific  
112 Colonnade Road,  
Ottawa, ON K2E 7L6,  
Canada  
Tel: 1-800-234-7437

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

##### **Manufacturer**

Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

##### **Emergency Telephone Number**

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11

Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99

**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

### 2. Hazard(s) identification

#### Classification

##### **WHMIS 2015 Classification**

Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

|   |            |
|---|------------|
| <b>Skin Corrosion/irritation</b>                        | Category 2 |
| <b>Serious Eye Damage/Eye Irritation</b>                | Category 2 |
| <b>Specific target organ toxicity (single exposure)</b> | Category 3 |
| Target Organs - Respiratory system.                     |            |

#### Label Elements

##### **Signal Word**

Warning

##### **Hazard Statements**

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation

**Precautionary Statements****Prevention**

Avoid breathing dust/fume/gas/mist/vapors/spray  
 Wash face, hands and any exposed skin thoroughly after handling  
 Use only outdoors or in a well-ventilated area  
 Wear protective gloves/protective clothing/eye protection/face protection

**Response**

IF ON SKIN: Wash with plenty of soap and water  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Call a POISON CENTER/ doctor if you feel unwell  
 Take off contaminated clothing

**Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other Hazards**

Light sensitive

### 3. Composition/Information on Ingredients

| Component                               | CAS-No    | Weight % |
|---|-----------|----------|
| Silver, (diethylcarbamodithioato-S,S')- | 1470-61-7 | >95      |

### 4. First-aid measures

|   |   |
|---|---|
| <b>General Advice</b>   | If symptoms persist, call a physician.  |
| <b>Eye Contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.   |
| <b>Skin Contact</b>   | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. |
| <b>Inhalation</b>   | Move to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.        |
| <b>Ingestion</b>  | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.             |
| <b>Most important symptoms/effects<br/>Notes to Physician</b> | None reasonably foreseeable.<br>Treat symptomatically   |

### 5. Fire-fighting measures

|                                       |  |
|---------------------------------------|--|
| <b>Suitable Extinguishing Media</b>   | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| <b>Unsuitable Extinguishing Media</b> | No information available   |

|   |                          |
|---|--------------------------|
| <b>Flash Point</b>                      | No information available |
| <b>Method -</b>                         | No information available |
| <b>Autoignition Temperature</b>         | Not applicable           |
| <b>Explosion Limits</b>                 |                          |
| <b>Upper</b>                            | No data available        |
| <b>Lower</b>                            | No data available        |
| <b>Sensitivity to Mechanical Impact</b> | No information available |
| <b>Sensitivity to Static Discharge</b>  | No information available |

**Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products**

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

**Protective Equipment and Precautions for Firefighters**

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

**NFPA**

|               |                     |                    |                         |
|---------------|---------------------|--------------------|-------------------------|
| <b>Health</b> | <b>Flammability</b> | <b>Instability</b> | <b>Physical hazards</b> |
| 2             | 1                   | 0                  | N/A                     |

**6. Accidental release measures**

|                                  |  |
|----------------------------------|--|
| <b>Personal Precautions</b>      | Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation.  |
| <b>Environmental Precautions</b> | Should not be released into the environment. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system. |

|   |  |
|---|--|
| <b>Methods for Containment and Clean Up</b> | Sweep up or vacuum up spillage and collect in suitable container for disposal. Keep in suitable, closed containers for disposal. |
|---|--|

**7. Handling and storage**

|                 |   |
|-----------------|---|
| <b>Handling</b> | Wear personal protective equipment. Avoid dust formation. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. |
| <b>Storage</b>  | Keep in a dry place. Keep container tightly closed. Keep away from direct sunlight. To maintain product quality: Keep refrigerated.                                 |

**8. Exposure controls / personal protection**

|                            |   |
|----------------------------|---|
| <b>Exposure Guidelines</b> | This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
|----------------------------|---|

| Component                                | Alberta | British Columbia  | Ontario TWA/EV | Quebec | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--|---------|---|----------------|--------|-----------|----------|------------|
| Silver, (diethylcarbamodithioato -S,S')- |         | TWA: 0.01 mg/m <sup>3</sup><br>STEL: 0.03 mg/m <sup>3</sup> |                |        |           |          |            |

**Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

**Personal protective equipment**

|                        |                   |
|------------------------|-------------------|
| <b>Eye Protection</b>  | Goggles           |
| <b>Hand Protection</b> | Protective gloves |

| Glove material | Breakthrough time                 | Glove thickness | Glove comments         |
|----------------|-----------------------------------|-----------------|------------------------|
| Nitrile rubber | See manufacturers recommendations | -               | Splash protection only |
| Neoprene       |                                   |                 |                        |
| Natural rubber |                                   |                 |                        |
| PVC            |                                   |                 |                        |

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

**Respiratory Protection**

No protective equipment is needed under normal use conditions.

**Environmental exposure controls**

No information available.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday.

## 9. Physical and chemical properties

|   |                               |
|---|-------------------------------|
| <b>Physical State</b>                         | Powder Solid                  |
| <b>Appearance</b>                             | Green                         |
| <b>Odor</b>                                   | Strong                        |
| <b>Odor Threshold</b>                         | No information available      |
| <b>pH</b>                                     | No information available      |
| <b>Melting Point/Range</b>                    | 172 - 175 °C / 341.6 - 347 °F |
| <b>Boiling Point/Range</b>                    | No information available      |
| <b>Flash Point</b>                            | No information available      |
| <b>Evaporation Rate</b>                       | Not applicable                |
| <b>Flammability (solid,gas)</b>               | No information available      |
| <b>Flammability or explosive limits</b>       |                               |
| <b>Upper</b>                                  | No data available             |
| <b>Lower</b>                                  | No data available             |
| <b>Vapor Pressure</b>                         | No information available      |
| <b>Vapor Density</b>                          | Not applicable                |
| <b>Specific Gravity</b>                       | No information available      |
| <b>Solubility</b>                             | insoluble                     |
| <b>Partition coefficient; n-octanol/water</b> | No data available             |
| <b>Autoignition Temperature</b>               | Not applicable                |
| <b>Decomposition Temperature</b>              | No information available      |
| <b>Viscosity</b>                              | Not applicable                |
| <b>Molecular Formula</b>                      | C5 H10 Ag N S2                |
| <b>Molecular Weight</b>                       | 256.13                        |

## 10. Stability and reactivity

|                        |  |
|------------------------|--|
| <b>Reactive Hazard</b> | None known, based on information available       |
| <b>Stability</b>       | Stable under normal conditions. Light sensitive. |

|   |   |
|---|---|
| <b>Conditions to Avoid</b>              | Exposure to light. Incompatible products.   |
| <b>Incompatible Materials</b>           | Strong oxidizing agents   |
| <b>Hazardous Decomposition Products</b> | Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Sulfur oxides, Heavy metal oxides |
| <b>Hazardous Polymerization</b>         | Hazardous polymerization does not occur.  |
| <b>Hazardous Reactions</b>              | None under normal processing.   |

## 11. Toxicological information

### Acute Toxicity

#### Product Information

#### Component Information

**Toxicologically Synergistic Products** No information available

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Irritation** Irritating to eyes, respiratory system and skin

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component                                       | CAS-No    | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|---|-----------|------------|------------|------------|------------|------------|
| Silver,<br>(diethylcarbamo-dithioa<br>to-S,S')- | 1470-61-7 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** Respiratory system

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

Do not empty into drains. May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

**Persistence and Degradability** Insoluble in water May persist

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Is not likely mobile in the environment due its low water solubility.

### 13. Disposal considerations

**Waste Disposal Methods** 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.

### 14. Transport information

**DOT** Not regulated  
**TDG** Not regulated  
**IATA** Not regulated  
**IMDG/IMO** Not regulated

### 15. Regulatory information

All of the components in the product are on the following Inventory lists: X = listed

#### International Inventories

| Component                                  | DSL | NDSL | TSCA | EINECS    | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|--|-----|------|------|-----------|--------|-----|-------|------|------|-------|------|
| Silver,<br>(diethylcarbomodithioato-S,S')- | X   | -    | X    | 216-003-7 | -      |     | X     | -    | X    | X     | -    |

#### Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

### 16. Other information

**Prepared By** Regulatory Affairs  
 Thermo Fisher Scientific  
 Email: EMSDS.RA@thermofisher.com

**Creation Date** 19-October-2010

**Revision Date** 23-January-2018

**Print Date** 23-January-2018

**Revision Summary** This document has been updated to comply with the requirements of WHMIS 2015 to align with the Globally Harmonised System (GHS) for the Classification and Labelling of Chemicals.

#### Disclaimer

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

**End of SDS**