

**Streptomycin Sulphate**  
**CAS NO 3810-74-0****MATERIAL SAFETY DATA SHEET**  
**SDS/MSDS****SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifiers**

Product name : Streptomycin Sulphate

CAS-No. : 3810-74-0

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

Identified uses : Laboratory chemicals, Industrial &amp; for professional use only.

**1.3 Details of the supplier of the safety data sheet**Company : Central Drug House (P) Ltd  
7/28 Vardaan House  
Ansari Road Daryaganj  
New Delhi -110002  
INDIA

Telephone : +91 11 49404040

Email : [care@cdhfinechemical.com](mailto:care@cdhfinechemical.com)**1.4 Emergency telephone number**

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture**

Classification acc. to GHS

| Section | Hazard class          | Category | Hazard class and category | Hazard statement |
|---------|-----------------------|----------|---------------------------|------------------|
| 3.10    | acute toxicity (oral) | 4        | Acute Tox. 4              | H302             |
| 3.7     | reproductive toxicity | 2        | Repr. 2                   | H361fd           |

For full text of abbreviations: see SECTION 16.

**2.2 Label elements**

Labelling

- Signal word warning

- Pictograms

GHS07, GHS08



- Hazard statements

H302

Harmful if swallowed.

H361fd

Suspected of damaging fertility. Suspected of damaging the unborn child.

#### - Precautionary statements

|           |   |
|-----------|---|
| P201      | Obtain special instructions before use.   |
| P270      | Do not eat, drink or smoke when using this product.   |
| P280      | Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. |
| P301+P312 | IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.                                 |
| P308+P313 | IF exposed or concerned: Get medical advice/attention.  |
| P330      | Rinse mouth.  |
| P405      | Store locked up.  |
| P501      | Dispose of contents/container to industrial combustion plant.                                 |

### 2.3 Other hazards

#### Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

#### Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Name of substance Streptomycin sulphate, Cell Culture Tested

Identifiers

CAS No 3810-74-0

EC No 223-286-0

| Specific Conc. Limits | M-Factors | ATE       | Exposure route |
|-----------------------|-----------|-----------|----------------|
| -                     | -         | 500 mg/kg | oral           |

Molecular formula  $C_{21}H_{39}N_7O_{12} \cdot 1.5H_2SO_4$

Molar mass 728.69 g/mol

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

#### Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

#### Following skin contact

Brush off loose particles from skin. Rinse skin with water/shower.

#### Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

#### Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

#### **4.2 Most important symptoms and effects, both acute and delayed**

Symptoms and effects are not known to date.

#### **4.3 Indication of any immediate medical attention and special treatment needed**

none

### **SECTION 5: Firefighting measures**

#### **5.1 Extinguishing media**

Suitable extinguishing media

Water, Foam, ABC-powder

Unsuitable extinguishing media

Water jet

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

Deposited combustible dust has considerable explosion potential.

Hazardous combustion products

Nitrogen oxides (NO<sub>x</sub>), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Sulphur oxides (SO<sub>x</sub>)

#### **5.3 Advice for firefighters**

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

### **SECTION 6: Accidental release measures**

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

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### **6.2 Environmental precautions**

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

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

Advice on how to contain a spill

Covering of drains, Take up mechanically

Advice on how to clean up a spill

Take up mechanically.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### **6.4 Reference to other sections**

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Take precautionary measures against static discharge. Use only in well-ventilated areas. Ground/bond container and receiving equipment.

- Specific notes/details

Dust deposits may accumulate on all deposition surfaces in a technical room. The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

#### Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

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

#### Managing of associated risks

- Explosive atmospheres

Removal of dust deposits.

- Ventilation requirements

Use local and general ventilation.

- Specific designs for storage rooms or vessels

- Storage temperature

Recommended storage temperature: 2 – 8 °C

### 7.3 Specific end use(s)

See section 16 for a general overview.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

| Occupational exposure limit values (Workplace Exposure Limits) |               |        |            |           |             |            |              |                 |                   |          |           |
|--|---------------|--------|------------|-----------|-------------|------------|--------------|-----------------|-------------------|----------|-----------|
| Country  | Name of agent | CAS No | Identifier | TWA [ppm] | TWA [mg/ms] | STEL [ppm] | STEL [mg/ms] | Ceiling-C [ppm] | Ceiling-C [mg/ms] | Notation | Source    |
| GB   | dust          |        | WEL        |           | 10          |            |              |                 |                   | i        | EH40/2005 |
| GB   | dust          |        | WEL        |           | 4           |            |              |                 |                   | r        | EH40/2005 |

#### Notation

|           |   |
|-----------|---|
| Ceiling-C | ceiling value is a limit value above which exposure should not occur  |
| i         | inhalable fraction  |
| r         | respirable fraction   |
| STEL      | short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)                      |
| TWA       | time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours<br>time-weighted average (unless otherwise specified) |

### 8.2 Exposure controls

#### Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

In the case of wanting to use the gloves again, clean them before taking off and air them well.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

Particulate filter device (EN 143).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

## **SECTION 9: Physical and chemical properties**

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

|  |   |
|--|---|
| Physical state   | solid   |
| Colour   | White to light yellow hygroscopic powder                  |
| Odour  | characteristic  |
| Melting point/freezing point                             | not determined  |
| Boiling point or initial boiling point and boiling range | not determined  |
| Flammability   | this material is combustible, but will not ignite readily |
| Lower and upper explosion limit                          | not relevant (solid)                                      |
| Flash point  | not applicable  |
| Auto-ignition temperature                                | not determined  |
| Decomposition temperature                                | not relevant  |
| pH (value)   | not applicable  |
| Kinematic viscosity                                      | not relevant  |
| Solubility(ies)  | not determined  |
| Partition coefficient                                    |   |
| Partition coefficient n-octanol/water (log value)        | this information is not available                         |

|                                 |                      |
|---------------------------------|----------------------|
| Vapour pressure                 | not determined       |
| Density and/or relative density |                      |
| Density                         | not determined       |
| Relative vapour density         | not relevant (solid) |
| Particle characteristics        | no data available    |

## 9.2 Other information

|  |  |
|--|--|
| Information with regard to physical hazard classes | hazard classes acc. to GHS (physical hazards):<br>not relevant |
| Other safety characteristics                       |  |
| Solid content                                      | 100 %  |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

### 10.2 Chemical stability

See below "Conditions to avoid".

### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

#### Hints to prevent fire or explosion

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

### 10.5 Incompatible materials

Oxidisers

### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

## **SECTION 11: Toxicological information**

### **11.1 Information on toxicological effects**

#### **Classification acc. to GHS**

Acute toxicity

Harmful if swallowed.

- Acute toxicity estimate (ATE)

Oral 500 mg/kg

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Suspected of damaging the unborn child. Suspected of damaging fertility.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

### **11.2 Information on other hazards**

There is no additional information.

## **SECTION 12: Ecological information**

### **12.1 Toxicity**

Shall not be classified as hazardous to the aquatic environment.

### **12.2 Persistence and degradability**

Data are not available.

### **12.3 Bioaccumulative potential**

Data are not available.

### **12.4 Mobility in soil**

Data are not available.

### **12.5 Results of PBT and vPvB assessment**

According to the results of its assessment, this substance is not a PBT or a vPvB.

## 12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

## 12.7 Other adverse effects

Data are not available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

#### Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## SECTION 14: Transport information

- |  |   |
|--|---|
| 14.1 UN number or ID number                                  | not subject to transport regulations                                  |
| 14.2 UN proper shipping name                                 | not relevant  |
| 14.3 Transport hazard class(es)                              | none  |
| 14.4 Packing group   | not assigned  |
| 14.5 Environmental hazards                                   | non-environmentally hazardous acc. to the dangerous goods regulations |
| 14.6 Special precautions for user                            | There is no additional information.                                   |
| 14.7 Maritime transport in bulk according to IMO instruments | The cargo is not intended to be carried in bulk.                      |

### Information for each of the UN Model Regulations

#### **International Maritime Dangerous Goods Code (IMDG) - Additional information**

Not subject to IMDG.

#### **International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information**

Not subject to ICAO-IATA.

## SECTION 15: Regulatory information

- ### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- #### Relevant provisions of the European Union (EU)
- ##### Deco-Paint Directive

VOC content 0 %

**Industrial Emissions Directive (IED)**

VOC content

0 %

**Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)**

not listed

**Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)**

not listed

**Water Framework Directive (WFD)**

| List of pollutants (WFD)                   |        |           |         |
|--|--------|-----------|---------|
| Name of substance                          | CAS No | Listed in | Remarks |
| Streptomycin sulphate, Cell Culture Tested |        | a)        |         |

Legend

a) Indicative list of the main pollutants

**Regulation on persistent organic pollutants (POP)**

not listed

**National regulations (GB)****List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list**

not listed

**Restrictions according to GB REACH, Annex 17**

not listed

**National inventories**

| Country | Inventory | Status                       |
|---------|-----------|------------------------------|
| US      | TSCA      | substance is listed (ACTIVE) |

Legend

TSCA Toxic Substance Control Act

**15.2 Chemical safety assessment**

No Chemical Safety Assessment has been carried out for this substance.

**SECTION 16: Other information****Abbreviations and acronyms**

| Abbr.     | Descriptions of used abbreviations  |
|-----------|---|
| ADR       | Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road) |
| ATE       | Acute Toxicity Estimate   |
| CAS       | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)  |
| Ceiling-C | Ceiling value   |
| DGR       | Dangerous Goods Regulations (see IATA/DGR)  |

| <b>Abbr.</b> | <b>Descriptions of used abbreviations</b>   |
|--------------|---|
| EC No        | The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)     |
| ED           | Endocrine disruptor   |
| EH40/2005    | EH40/2005 Workplace exposure limits ( <a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/">http://www.nationalarchives.gov.uk/doc/open-government-licence/</a> ) |
| EINECS       | European Inventory of Existing Commercial Chemical Substances   |
| ELINCS       | European List of Notified Chemical Substances   |
| GB REACH     | The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)  |
| GHS          | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations   |
| IATA         | International Air Transport Association   |
| IATA/DGR     | Dangerous Goods Regulations (DGR) for the air transport (IATA)  |
| ICAO         | International Civil Aviation Organization   |
| IMDG         | International Maritime Dangerous Goods Code   |
| NLP          | No-Longer Polymer   |
| PBT          | Persistent, Bioaccumulative and Toxic   |
| ppm          | Parts per million   |
| REACH        | Registration, Evaluation, Authorisation and Restriction of Chemicals  |
| RID          | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)               |
| STEL         | Short-term exposure limit   |
| TWA          | Time-weighted average   |
| VOC          | Volatile Organic Compounds  |
| vPvB         | Very Persistent and very Bioaccumulative  |
| WEL          | Workplace exposure limit  |

### Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### List of relevant phrases (code and full text as stated in section 2 and 3)

| <b>Code</b> | <b>Text</b>  |
|-------------|--|
| H302        | Harmful if swallowed.  |
| H361fd      | Suspected of damaging fertility. Suspected of damaging the unborn child. |

### Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.cdhfinechemical.com](http://www.cdhfinechemical.com) for additional terms and conditions of sale.