

## Stannous chloride dihydrate, Hi-AR™/ACS

Version number: GHS 1.0

Date of compilation: 2024-07-12

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

|                                 |                                                |
|---------------------------------|------------------------------------------------|
| Identification of the substance | <b>Stannous chloride dihydrate, Hi-AR™/ACS</b> |
| CAS number                      | 10025-69-1                                     |
| Alternative name(s)             | Tin (II) chloride dihydrate, Hi-AR™/ACS        |
| Alternative number(s)           | GRM6390                                        |

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

|                          |                                                                                                             |
|--------------------------|-------------------------------------------------------------------------------------------------------------|
| Relevant identified uses | Laboratory chemicals, Manufacture of substances                                                             |
| Uses advised against     | Do not use for squirting or spraying. Do not use for products which come into direct contact with the skin. |

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

HiMedia Laboratories Pvt. Ltd.  
Plot No. C40, Road No. 21Y, Wagle Industrial Area, MIDC  
Thane West Maharashtra 400604  
India

Telephone: +91 22 69034800, +91 22 61169797  
e-mail: info@himedialabs.com  
Website: www.himedialabs.com

e-mail (competent person) info@himedialabs.com (HiMedia Laboratories Pvt. Ltd)

#### 1.4 Emergency telephone number

Emergency information service +91 9321269711

### 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             |
| 3.2     | skin corrosion/irritation         | 1        | Skin Corr. 1              | H314             |
| 3.3     | serious eye damage/eye irritation | 1        | Eye Dam. 1                | H318             |

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis.

#### 2.2 Label elements

Labelling

- Signal word danger

## Stannous chloride dihydrate, Hi-AR™/ACS

Version number: GHS 1.0

Date of compilation: 2024-07-12

### - Pictograms

GHS05, GHS07



### - Hazard statements

H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.

### - Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
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/doctor.  
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 Stannous chloride dihydrate, Hi-AR™/ACS  
Identifiers  
CAS No 10025-69-1  
EC No 231-868-0

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

Molecular formula  $\text{SnCl}_2 \cdot 2\text{H}_2\text{O}$   
Molar mass 225.65 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. In case of respiratory tract irritation, consult a physician. Provide fresh air.

## Stannous chloride dihydrate, Hi-AR<sup>TM</sup>/ACS

Version number: GHS 1.0

Date of compilation: 2024-07-12

Following skin contact

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

Hazardous combustion products

Hydrogen chloride (HCl)

### 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.

## Stannous chloride dihydrate, Hi-AR™/ACS

Version number: GHS 1.0

Date of compilation: 2024-07-12

### 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.

##### 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: 10 – 30 °C
- Packaging compatibilities  
Only packagings which are approved (e.g. acc. to ADR) may be used.

#### 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/m³] | STEL [ppm] | STEL [mg/m³] | Ceiling-C [ppm] | Ceiling-C [mg/m³] | 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 time-weighted average (unless otherwise specified) |

#### 8.2 Exposure controls

##### Appropriate engineering controls

General ventilation.

## Stannous chloride dihydrate, Hi-AR™/ACS

Version number: GHS 1.0

Date of compilation: 2024-07-12

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                                                   | Colourless or white to off-white hygroscopic crystals or powder or solid |
| Odour                                                    | characteristic                                                           |
| Melting point/freezing point                             | not determined                                                           |
| Boiling point or initial boiling point and boiling range | not determined                                                           |
| Flammability                                             | non-combustible                                                          |
| 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) | not relevant (inorganic) |
|---------------------------------------------------|--------------------------|

|                 |                |
|-----------------|----------------|
| Vapour pressure | not determined |
|-----------------|----------------|

## Stannous chloride dihydrate, Hi-AR™/ACS

Version number: GHS 1.0

Date of compilation: 2024-07-12

### 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.

### 10.5 Incompatible materials

There is no additional information.

### 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

Causes severe skin burns and eye damage.

#### Serious eye damage/eye irritation

Causes serious eye damage.

#### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

## Stannous chloride dihydrate, Hi-AR<sup>TM</sup>/ACS

Version number: GHS 1.0

Date of compilation: 2024-07-12

### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

### Carcinogenicity

Shall not be classified as carcinogenic.

### Reproductive toxicity

Shall not be classified as a reproductive toxicant.

### 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

#### Waste treatment-relevant information

Recycling/reclamation of other inorganic materials.

#### 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

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. 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.

## Stannous chloride dihydrate, Hi-AR™/ACS

Version number: GHS 1.0

Date of compilation: 2024-07-12

### SECTION 14: Transport information

#### 14.1 UN number or ID number

|           |         |
|-----------|---------|
| ADR/RID   | UN 3260 |
| IMDG-Code | UN 3260 |
| ICAO-TI   | UN 3260 |

#### 14.2 UN proper shipping name

|                |                                            |
|----------------|--------------------------------------------|
| ADR/RID        | CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. |
| IMDG-Code      | CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. |
| ICAO-TI        | Corrosive solid, acidic, inorganic, n.o.s. |
| Technical name | Stannous chloride dihydrate, Hi-AR™/ACS    |

#### 14.3 Transport hazard class(es)

|           |   |
|-----------|---|
| ADR/RID   | 8 |
| IMDG-Code | 8 |
| ICAO-TI   | 8 |

#### 14.4 Packing group

|           |    |
|-----------|----|
| ADR/RID   | II |
| IMDG-Code | II |
| ICAO-TI   | II |

#### 14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

#### 14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

#### 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

##### **Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) - Additional information**

|                     |    |
|---------------------|----|
| Classification code | C2 |
| Danger label(s)     | 8  |



|                               |      |
|-------------------------------|------|
| Special provisions (SP)       | 274  |
| Excepted quantities (EQ)      | E2   |
| Limited quantities (LQ)       | 1 kg |
| Transport category (TC)       | 2    |
| Tunnel restriction code (TRC) | E    |
| Hazard identification No      | 80   |
| Emergency Action Code         | 2X   |

## Stannous chloride dihydrate, Hi-AR<sup>™</sup>/ACS

Version number: GHS 1.0

Date of compilation: 2024-07-12

### Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) - Additional information

Classification code C2  
Danger label(s) 8



Special provisions (SP) 274  
Excepted quantities (EQ) E2  
Limited quantities (LQ) 1 kg  
Transport category (TC) 2  
Hazard identification No 80

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

Marine pollutant -  
Danger label(s) 8



Special provisions (SP) 274  
Excepted quantities (EQ) E2  
Limited quantities (LQ) 1 kg  
EmS F-A, S-B  
Stowage category B  
Segregation group 1 - Acids

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

Danger label(s) 8



Special provisions (SP) A3  
Excepted quantities (EQ) E2  
Limited quantities (LQ) 5 kg

## 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 % |
|-------------|-----|

## Stannous chloride dihydrate, Hi-AR™/ACS

Version number: GHS 1.0

Date of compilation: 2024-07-12

**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 |
| Stannous chloride dihydrate, Hi-AR™/ACS |        | 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              |
|---------|------------|---------------------|
| EU      | REACH Reg. | substance is listed |

Legend

REACH Reg. REACH registered substances

### 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)                                                                                                                                            |
| 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> ) |

## Stannous chloride dihydrate, Hi-AR™/ACS

Version number: GHS 1.0

Date of compilation: 2024-07-12

| Abbr.     | Descriptions of used abbreviations                                                                                                                                      |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EINECS    | European Inventory of Existing Commercial Chemical Substances                                                                                                           |
| ELINCS    | European List of Notified Chemical Substances                                                                                                                           |
| EmS       | Emergency Schedule                                                                                                                                                      |
| 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                                                                                                                               |
| ICAO-TI   | Technical instructions for the safe transport of dangerous goods by air                                                                                                 |
| IMDG      | International Maritime Dangerous Goods Code                                                                                                                             |
| IMDG-Code | 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)

| Code | Text                                     |
|------|------------------------------------------|
| H302 | Harmful if swallowed.                    |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage.               |

### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.