

## MATERIAL SAFETY DATA SHEET (MSDS)

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

#### 1.1. Product identifier

Product form : Substance  
:  
EC no : 231-592-0  
CAS No : 7646-85-7  
Product code : 06546  
Chemical structure :



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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Industrial. For professional use only.

##### 1.2.2. Uses advised against

No additional information available

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

SPAN LAB  
UNIT NO. 14, SKY INDUSTRIAL ESTATE, WALIV, VASAI (E)  
401208 Mumbai - INDIA  
PH: +91 9820509929  
[info@spanlab.in](mailto:info@spanlab.in) [www.spanlab.in](http://www.spanlab.in)

### SECTION 2: Hazards identification

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

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), H302  
Category 4  
Skin corrosion/irritation, H314  
Category 1B  
Hazardous to the aquatic H410  
environment — Chronic  
Hazard, Category 1

Full text of classification categories and H statements : see section 16

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### Classification according to Directive 67/548/EEC or 1999/45/EC

Xn; R22

C; R34

N; R50/53

Full text of R-phrases: see section 16

### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

GHS07

GHS09

Signal word (CLP) : Danger

Hazard statements (CLP) : H302 - Harmful if swallowed  
H314 - Causes severe skin burns and eye damage  
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP) : P273 - Avoid release to the environment  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
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  
P501 - Dispose of contents/container to ...

## 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

| Name                            | Product identifier                      | %   |
|---------------------------------|---|-----|
| ZINC CHLORIDE MOLECULAR BIOLOGY | (CAS No) 7646-85-7<br>(EC no) 231-592-0 | 100 |

Full text of R- and H-phrases: see section 16

### 3.2. Mixture

Not applicable

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### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
- 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. Call a POISON CENTER or doctor/physician if you feel unwell. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

- Symptoms/injuries : Causes severe skin burns and eye damage.
- Symptoms/injuries after ingestion : Harmful if swallowed.

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

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

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

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

No additional information available

#### 5.3. Advice for firefighters

- 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

- Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

- Protective equipment : Use personal protective equipment as required.

#### 6.2. Environmental precautions

Very toxic to aquatic life with long lasting effects.

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

- Methods for cleaning up : Minimize generation of dust. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Do not breathe vapours. Avoid contact with skin and eyes.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

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

Storage conditions : Store in a well-ventilated place. Keep container tightly closed.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Eye protection : Chemical goggles or face shield

Skin and body protection : Wear suitable protective clothing

## SECTION 9: Physical and chemical properties

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

Physical state : Solid

Colour : White crystalline.

Odour : odourless.

Odour threshold : No data available

pH : 4 Aqueous solution

Relative evaporation rate (butylacetate=1) : No data available

Melting point : 293 °C

Freezing point : No data available

Boiling point : 732 °C

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available

Density : 2.91 g/cm<sup>3</sup>

Solubility : Water: Soluble in water

Log Pow : No data available

Viscosity, kinematic : No data available

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Potential adverse human health effects and symptoms : Harmful if swallowed.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

#### 12.2. Persistence and degradability

##### ZINC CHLORIDE MOLECULAR BIOLOGY (7646-85-7)

|                               |   |
|-------------------------------|---|
| Persistence and degradability | May cause long-term adverse effects in the environment. |
|-------------------------------|---|

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

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

No additional information available

#### 12.6. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container to ...

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

|               |        |
|---------------|--------|
| UN-No. (ADR)  | : 2331 |
| UN-No. (IMDG) | : 2331 |
| UN-No.(IATA)  | : 2331 |
| UN-No.(ADN)   | : 2331 |
| UN-No. (RID)  | : 2331 |

#### 14.2. UN proper shipping name

|                                      |  |
|--------------------------------------|--|
| Proper Shipping Name (ADR)           | : ZINC CHLORIDE, ANHYDROUS   |
| Proper Shipping Name (IMDG)          | : ZINC CHLORIDE, ANHYDROUS   |
| Proper Shipping Name (IATA)          | : ZINC CHLORIDE, ANHYDROUS   |
| Proper Shipping Name (ADN)           | : ZINC CHLORIDE, ANHYDROUS   |
| Proper Shipping Name (RID)           | : ZINC CHLORIDE, ANHYDROUS   |
| Transport document description (ADR) | : UN 2331 ZINC CHLORIDE, ANHYDROUS, 8, III, (E), ENVIRONMENTALLY HAZARDOUS |

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|                      |                     |
|----------------------|---------------------|
| Viscosity, dynamic   | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits     | : 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

No additional information available

### 10.4. Conditions to avoid

Direct sunlight. Air contact. Moisture.

### 10.5. Incompatible materials

Oxidizing agent.

### 10.6. Hazardous decomposition products

Thermal decomposition generates : Corrosive vapours.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

|  |  |
|--|--|
| Acute toxicity                                     | : Oral: Harmful if swallowed.  |
| Skin corrosion/irritation                          | : Causes severe skin burns and eye damage.<br>pH: 4 Aqueous solution |
| Serious eye damage/irritation                      | : Serious eye damage, category 1, implicit<br>pH: 4 Aqueous solution |
| Respiratory or skin sensitisation                  | : 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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### 14.4. Packing group


|                      |       |
|----------------------|-------|
| Packing group (ADR)  | : III |
| Packing group (IMDG) | : III |
| Packing group (IATA) | : III |
| Packing group (ADN)  | : III |
| Packing group (RID)  | : III |

### 14.5. Environmental hazards

|                               |  |
|-------------------------------|--|
| Dangerous for the environment | : Yes                                    |
| Marine pollutant              | : Yes                                    |
| Other information             | : No supplementary information available |

### 14.6. Special precautions for user

#### - Overland transport

|   |   |
|---|---|
| Classification code (ADR)                                 | : C2  |
| Limited quantities (ADR)                                  | : 5kg   |
| Excepted quantities (ADR)                                 | : E1  |
| Packing instructions (ADR)                                | : P002, IBC08, LP02, R001   |
| Special packing provisions (ADR)                          | : B3  |
| Mixed packing provisions (ADR)                            | : MP10  |
| Portable tank and bulk container instructions (ADR)       | : T1  |
| Portable tank and bulk container special provisions (ADR) | : TP33  |
| Tank code (ADR)   | : SGAV  |
| Vehicle for tank carriage                                 | : AT  |
| Transport category (ADR)                                  | : 3   |
| Special provisions for carriage - Bulk (ADR)              | : VC1, VC2, AP7   |
| Hazard identification number (Kemler No.)                 | : 80  |
| Orange plates   | :  |
| Tunnel restriction code (ADR)                             | : E   |
| EAC code  | : 2X  |

#### - Transport by sea

|                                 |              |
|---------------------------------|--------------|
| Limited quantities (IMDG)       | : 5 kg       |
| Excepted quantities (IMDG)      | : E1         |
| Packing instructions (IMDG)     | : P002, LP02 |
| IBC packing instructions (IMDG) | : IBC08      |
| IBC special provisions (IMDG)   | : B3         |
| Tank instructions (IMDG)        | : T1         |
| Tank special provisions (IMDG)  | : TP33       |
| EmS-No. (Fire)                  | : F-A        |
| EmS-No. (Spillage)              | : S-B        |
| Stowage category (IMDG)         | : A          |
| MFAG-No                         | : 154        |

#### - Air transport

|                                |        |
|--------------------------------|--------|
| PCA Excepted quantities (IATA) | : E1   |
| PCA Limited quantities (IATA)  | : Y845 |

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|                                       |  |
|---------------------------------------|--|
| Transport document description (IMDG) | : UN 2331 ZINC CHLORIDE, ANHYDROUS, 8, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS |
| Transport document description (IATA) | : UN 2331 ZINC CHLORIDE, ANHYDROUS, 8, III, ENVIRONMENTALLY HAZARDOUS                  |
| Transport document description (ADN)  | : UN 2331 ZINC CHLORIDE, ANHYDROUS, 8, III, ENVIRONMENTALLY HAZARDOUS                  |
| Transport document description (RID)  | : UN 2331 ZINC CHLORIDE, ANHYDROUS, 8, III, ENVIRONMENTALLY HAZARDOUS                  |

### 14.3. Transport hazard class(es)

#### ADR

|                                  |     |
|----------------------------------|-----|
| Transport hazard class(es) (ADR) | : 8 |
| Danger labels (ADR)              | : 8 |



#### IMDG

|                                   |     |
|-----------------------------------|-----|
| Transport hazard class(es) (IMDG) | : 8 |
| Danger labels (IMDG)              | : 8 |



#### IATA

|                                   |     |
|-----------------------------------|-----|
| Transport hazard class(es) (IATA) | : 8 |
| Hazard labels (IATA)              | : 8 |



#### ADN

|                                  |     |
|----------------------------------|-----|
| Transport hazard class(es) (ADN) | : 8 |
| Danger labels (ADN)              | : 8 |



#### RID

|                                  |     |
|----------------------------------|-----|
| Transport hazard class(es) (RID) | : 8 |
| Danger labels (RID)              | : 8 |





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|  |         |
|--|---------|
| PCA limited quantity max net quantity (IATA) | : 5kg   |
| PCA packing instructions (IATA)              | : 860   |
| PCA max net quantity (IATA)                  | : 25kg  |
| CAO packing instructions (IATA)              | : 864   |
| CAO max net quantity (IATA)                  | : 100kg |
| ERG code (IATA)                              | : 8L    |

### - Inland waterway transport

|                                   |          |
|-----------------------------------|----------|
| Classification code (ADN)         | : C2     |
| Limited quantities (ADN)          | : 5 kg   |
| Excepted quantities (ADN)         | : E1     |
| Equipment required (ADN)          | : PP, EP |
| Number of blue cones/lights (ADN) | : 0      |

### - Rail transport

|   |                           |
|---|---------------------------|
| Classification code (RID)                                 | : C2                      |
| Limited quantities (RID)                                  | : 5kg                     |
| Excepted quantities (RID)                                 | : E1                      |
| Packing instructions (RID)                                | : P002, IBC08, LP02, R001 |
| Special packing provisions (RID)                          | : B3                      |
| Mixed packing provisions (RID)                            | : MP10                    |
| Portable tank and bulk container instructions (RID)       | : T1                      |
| Portable tank and bulk container special provisions (RID) | : TP33                    |
| Tank codes for RID tanks (RID)                            | : SGAV                    |
| Transport category (RID)                                  | : 3                       |
| Special provisions for carriage – Bulk (RID)              | : VC1, VC2, AP7           |
| Colis express (express parcels) (RID)                     | : CE11                    |
| Hazard identification number (RID)                        | : 80                      |

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

ZINC CHLORIDE MOLECULAR BIOLOGY is not on the REACH Candidate List

ZINC CHLORIDE MOLECULAR BIOLOGY is not on the REACH Annex XIV List

#### 15.1.2. National regulations

##### Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 3, strongly hazardous to water (Classification according to VwVwS, Annex 3; WGK No 207)

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12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

### Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

### 15.2. Chemical safety assessment

No additional information available

### SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

|                     |   |
|---------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4   |
| Aquatic Chronic 1   | Hazardous to the aquatic environment — Chronic Hazard, Category 1                               |
| Skin Corr. 1B       | Skin corrosion/irritation, Category 1B  |
| H302                | Harmful if swallowed  |
| H314                | Causes severe skin burns and eye damage   |
| H410                | Very toxic to aquatic life with long lasting effects  |
| R22                 | Harmful if swallowed  |
| R34                 | Causes burns  |
| R50/53              | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment |
| C                   | Corrosive   |
| N                   | Dangerous for the environment   |
| Xn                  | Harmful   |

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*