

Lincomycin Hydrochloride

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Date of issue: 1/2/2019 Version: 1.0

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

1.1. Product identifier

| | |
|----------------|--|
| Product form | : Substance |
| Substance name | : Lincomycin Hydrochloride |
| IUPAC name | : (2S,4R)-N-[(1R,2R)-2-hydroxy-1-[(2R,3R,4S,5R,6R)-3,4,5-trihydroxy-6-(methylsulfonyl)oxan-2-yl]propyl]-1-methyl-4-propylpyrrolidine-2-carboxamide hydrochloride |
| EC-No. | : 212-726-7 |
| CAS-No. | : 859-18-7 |
| Product code | : 13052257 |
| Formula | : C ₁₈ H ₃₄ N ₂ O ₆ S · HCl |
| Product group | : Raw material |

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

1.2.1. Relevant identified uses

| | |
|----------------------------------|---|
| Main use category | : Professional use, Industrial use |
| Industrial/Professional use spec | : For professional use only Laboratory chemicals Industrial |

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Safell Organics
Molekula Ltd
Lingfield Way
Darlington - England
T +44 (0) 1949 823777 / +44 (0) 7590 545705
info@molekula.com / kbowen@molekula.com - www.molekula.com

1.4. Emergency telephone number

Emergency number : +44 (0) 7590 545705

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

| | |
|---|------|
| Skin corrosion/irritation, Category 2 | H315 |
| Serious eye damage/eye irritation, Category 2 | H319 |
| Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation | H335 |
| Full text of H statements : 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)



GHS07

| | |
|--------------------------------|--|
| Signal word (CLP) | : Warning |
| Hazard statements (CLP) | : H315 - Causes skin irritation. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation. |
| Precautionary statements (CLP) | : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. 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. P308+P313 - IF exposed or concerned: Get medical advice/attention. |

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

| Name | Product identifier | % |
|--------------------------|--|-----|
| Lincomycin Hydrochloride | (CAS-No.) 859-18-7 (EC-No.) 212-726-7 | 100 |

Full text of 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 possible show this sheet, if not available show packaging or label. Do not leave affected person unattended. |
| First-aid measures after inhalation | : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. If experiencing respiratory symptoms: Get medical advice/attention. |
| First-aid measures after skin contact | : After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Do not remove clothing if it sticks to the skin. If skin irritation occurs: Get medical advice/attention. |
| First-aid measures after eye contact | : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists. |
| First-aid measures after ingestion | : Rinse mouth. Do NOT induce vomiting. Get medical advice/attention. |

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

| | |
|-------------------------------------|--|
| Symptoms/effects after inhalation | : Inhalation may cause irritation (cough, short breathing, difficulty in breathing). |
| Symptoms/effects after skin contact | : irritation (itching, redness, blistering). |
| Symptoms/effects after eye contact | : Dust from this product may cause eye irritation. redness, itching, tears. |
| Symptoms/effects after ingestion | : Ingestion may cause nausea, vomiting and diarrhea. |

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. 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. Special hazards arising from the substance or mixture

| | |
|--|---|
| Hazardous decomposition products in case of fire | : Carbon oxides (CO, CO ₂). hydrogen chloride. Nitrogen oxides. Sulphur oxides. |
|--|---|

5.3. Advice for firefighters

| | |
|--------------------------------|---|
| Precautionary measures fire | : Exposure to fire/heat: seal off low-lying areas. Keep container tightly closed and away from heat, sparks and flame. |
| Firefighting instructions | : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment. |
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. |
| Other information | : Warn all persons of toxic hazard. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|------------------|--|
| General measures | : Isolate from fire, if possible, without unnecessary risk. No flames, no sparks. Eliminate all sources of ignition. Avoid dust formation. |
|------------------|--|

6.1.1. For non-emergency personnel

| | |
|----------------------------------|---|
| Protective equipment | : Wear recommended personal protective equipment. |
| Emergency procedures | : Evacuate unnecessary personnel. Mark out the contaminated area with signs and prevent access to unauthorized personnel. Avoid contact with skin, eyes and clothing. Do not breathe dust. Do not touch or walk on the spilled product. |
| Measures in case of dust release | : Keep upwind. Ventilate the area thoroughly, especially low lying areas (basements, workpits etc). |

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.

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6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide local exhaust or general room ventilation. Avoid creating or spreading dust.

Hygiene measures : Take off immediately all contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Always wash hands after handling the product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ensure adequate ventilation, especially in confined areas.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Heat sources. Keep container closed when not in use.

Incompatible products : Strong oxidisers.

Incompatible materials : Sources of ignition. Direct sunlight.

Storage temperature : 2 - 8 °C

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

Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety procedures. Provide local exhaust or general room ventilation.

Personal protective equipment:

Wear recommended personal protective equipment. Avoid all unnecessary exposure.

Hand protection:

The protective gloves to be used must comply with the specifications of the regulation 2016/425 and the resultant standard EN 374

| Type | Material | Permeation | Thickness (mm) | Penetration | Standard |
|------|----------------------|-------------------|----------------|-------------|----------|
| | Nitrile rubber (NBR) | 6 (> 480 minutes) | 0.11 | | EN 374 |

Eye protection:

Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Use eye protection according to EN 166, designed to protect against powders and dusts. Chemical goggles or safety glasses

| Type | Use | Characteristics | Standard |
|----------------|------|-------------------|----------|
| Safety glasses | Dust | With side shields | EN 166 |

Skin and body protection:

Emergency safety showers should be available in the immediate vicinity of any potential exposure. Keep suitable chemically resistant protective clothing readily available for emergency use

| Type | Standard |
|---|--------------|
| Total impervious protective suits, gloves, and boots must be worn to prevent any contact with the product | EN ISO 13982 |

Respiratory protection:

Self contained breathing apparatus, in case of emergency. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

| Device | Filter type | Condition | Standard |
|--|------------------|-----------------|----------|
| Respiratory protective device with a particle filter | Type P1, Type P2 | Dust protection | EN 14387 |

Other information:

Do not eat, drink or smoke during use.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|-----------------------|
| Physical state | : Solid |
| Appearance | : Crystalline powder. |
| Molecular mass | : 443 g/mol |
| Colour | : White to off white. |
| Odour | : slight. |
| Odour threshold | : No data available |
| pH | : 3 - 5.5 |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : 156 - 158 °C |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Non flammable. |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : No data available |
| Solubility | : No data available |
| Log Pow | : No data available |
| Viscosity, kinematic | : No data available |
| 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

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect from sunlight.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates :

Carbon oxides (CO, CO₂). hydrogen chloride. Nitrogen oxides. Sulphur oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|-----------------------------------|--|
| Acute toxicity (oral) | : Not classified |
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |
| Skin corrosion/irritation | : Causes skin irritation. pH: 3 - 5.5 |
| Additional information | : Based on available data, the classification criteria are not met |
| Serious eye damage/irritation | : Causes serious eye irritation. pH: 3 - 5.5 |
| Additional information | : Based on available data, the classification criteria are not met |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| Carcinogenicity | : Not classified |

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| | |
|------------------------|--|
| Additional information | : Based on available data, the classification criteria are not met |
| Reproductive toxicity | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| STOT-single exposure | : May cause respiratory irritation. |
| Additional information | : Based on available data, the classification criteria are not met |

| Lincomycin Hydrochloride (859-18-7) | |
|---|---|
| LOAEL (oral, rat) | > 5000 mg/kg bodyweight |
| STOT-repeated exposure | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| Aspiration hazard | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| Potential adverse human health effects and symptoms | : Based on available data, the classification criteria are not met. |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|--------------------------|------------------|
| Acute aquatic toxicity | : Not classified |
| Chronic aquatic toxicity | : Not classified |

| Lincomycin Hydrochloride (859-18-7) | |
|-------------------------------------|--|
| EC50 72h algae (1) | 379.39 mg/l Daphnia magna (Water flea) |

12.2. Persistence and degradability

| Lincomycin Hydrochloride (859-18-7) | |
|-------------------------------------|--------------------|
| Persistence and degradability | No data available. |

12.3. Bioaccumulative potential

| Lincomycin Hydrochloride (859-18-7) | |
|-------------------------------------|--------------------|
| Bioaccumulative potential | No data available. |

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

| Lincomycin Hydrochloride (859-18-7) | |
|--|--|
| This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII | |
| This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII | |

12.6. Other adverse effects

| | |
|------------------------|-------------------------------------|
| Additional information | : Avoid release to the environment. |
|------------------------|-------------------------------------|

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|--|---|
| Product/Packaging disposal recommendations | : Dispose in a safe manner in accordance with local/national regulations. |
| Ecology - waste materials | : Avoid release to the environment. |

SECTION 14: Transport information

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

| ADR | IMDG | IATA | ADN | RID |
|----------------------------------|---------------|---------------|---------------|---------------|
| 14.1. UN number | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.2. UN proper shipping name | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.3. Transport hazard class(es) | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.4. Packing group | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |

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14.5. Environmental hazards

Not regulated

Not regulated

Not regulated

Not regulated

Not regulated

No supplementary information available

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol 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

Lincomycin Hydrochloride is not on the REACH Candidate List

Lincomycin Hydrochloride is not on the REACH Annex XIV List

Directive 2012/18/EU (SEVESO III)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:

| | |
|---------------|--|
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |

SDS EU (REACH Annex II)

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