



Material Safety Data Sheet

Date of Issue: 03 Aug 2022

SECTION 1: PRODUCT AND COMPANY DETAILS

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|-------------------------|---|
| Product Name | Lisinopril Impurity E hydrochloride dihydrogensulfate mixed salt |
| Product Number | EPL-AA232 |
| Recommended Use | Research chemical. Not for drug, household or other uses. |
| Manufacturer | Epichem Pty Ltd (ABN 80 106 769 902) |
| Address Suite | 5, 3 Brodie-Hall Drive, Technology Park, Bentley WA 6102, Australia |
| Telephone Number | +61 (8) 6167 5200 (Office hours only) |
| Fax Number | +61 (8) 6167 5201 (Office hours only) |

SECTION 2: HAZARD IDENTIFICATION

Hazard Classification

Not found.

Hazard Statement(s)

H302 Harmful if swallowed. H332 Harmful if inhaled.

Precautionary Statement(s)

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash thoroughly after handling. P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P312 - Call a POISON CENTER or doctor/physician if you feel unwell. P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredient(s) Name(s)

Lisinopril Impurity E hydrochloride dihydrogensulfate mixed salt

Other Name(s)

(2S)-1-((2S)-6-amino-2-(((1R)-1-carboxy-3-phenylpropyl)amino)hexanoyl)pyrrolidine-2-carboxylic acid hydrochloride dihydrogensulfate mixed salt; Lisinopril (R,S,S) isomer;

CAS

2575516-49-1

SECTION 4: FIRST AID MEASURES

Skin Contact

Remove all contaminated articles of clothing, shoes, gloves, etc and immediately wash contaminated area with copious amounts of soap and water for at least 15 minutes. If irritation persists, SEEK MEDICAL ATTENTION.

Eye Contact

Immediately irrigate the eyes with copious amounts of water for several minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. If irritation persists, SEEK MEDICAL ATTENTION.

Inhalation

Remove to fresh air, rest and keep warm. If not breathing give artificial respiration. If breathing is difficult, give oxygen. In case of unconsciousness place patient in recovery position for transport. In severe cases or if symptoms persist, SEEK MEDICAL ATTENTION.

Ingestion

Wash out mouth with copious amounts of water provided person is conscious. Do not induce vomiting. SEEK MEDICAL ATTENTION.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media

Suitable: Water spray. Carbon dioxide, dry chemical powder or appropriate foam.

Special Risks

Specific Hazard(s): May emit toxic fumes under fire conditions.

Precautions for Firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions

Wear approved mask/respirator, protective clothing, suitable eye protection and gloves.

Methods of Cleaning Up

Mix with sand or similar inert absorbent material, sweep up and keep in a tightly closed container for disposal. See Section 13.

Avoid raising dust. Ventilate area and wash spill site after material pick up is complete.

In Case of Leak or Spill

Evacuate area.

SECTION 7: HANDLING AND STORAGE

Handling

This product should be handled only by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals, who should take into account the fire, health and chemical hazard data given on this sheet. It should always be handled in an efficient fume hood or equivalent system. It should be borne in mind that the toxicological and physiological properties of this material are not yet well determined and that new hazardous products may arise from reactions between chemicals. Do not breathe dust/vapour/spray. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure.

Storage

Store in tightly closed vessels in a cool, dry place. After opening, store at 2-8°C. Protect from heat, light and moisture.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Use appropriate engineering controls to reduce air contamination to approved/permissible national exposure standards. Where such systems are not available wear suitable personal protective equipment which performs satisfactorily and meets local/national standards. There should be local procedures for selection, training, inspection and maintenance of this equipment. Safety shower, eye wash and mechanical exhaust required.

Respiratory Precautions

Wear approved mask/respirator.

Skin Protection

Wear suitable protective clothing and compatible chemical-resistant gloves.

Eye Protection

Wear suitable safety glasses.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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|---------------------------------|---|
| Molecular Formula | C ₂₁ H ₃₁ N ₃ O ₅ .C ₂₁ H ₃₁ N ₃ O ₅ .H ₂ O ₄ S.HCl.HCl.HCl |
| Molecular Weight | 1,018.46 g/mol |
| Physical Form and Colour | Off-white powder |
| Boiling Point | Not available. |
| Melting Point | 122.0-135.7 °C (decomposition) |
| Flash Point | Not applicable. |
| Density | Not available. |
| Solubility in water | Not available. |

SECTION 10: STABILITY AND REACTIVITY

Stability

Stable under normal conditions.

Materials to Avoid

Strong oxidising agents.

Thermal decomposition / conditions to be avoided

Formation of toxic gases is possible during heating or in case of fire.

Possible Hazardous Combustion Products

Carbon monoxide, carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

Health Effects

To the best of our knowledge, the chemical, physical and toxicological properties of this specific compound have not been thoroughly investigated.

Route of Exposure

Skin Contact: May cause skin irritation. Sensitization possible through skin contact.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: May cause eye irritation.

Inhalation: May be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

Ingestion: Harmful if swallowed.

SECTION 12: ECOLOGICAL INFORMATION

Unknown.

SECTION 13: DISPOSAL CONSIDERATIONS

Arrange disposal by a licensed disposal company, in consultation with local Waste Disposal Authority in accordance with local, state and federal regulations. Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

SECTION 14: TRANSPORT INFORMATION

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|--|-----------------|
| UN Number | None allocated. |
| Dangerous Goods Class (Subsidiary Risk) | Not applicable. |
| Hazchem Code | Not applicable. |
| Poisons Schedule Number | Not applicable. |
| Packaging Group | Not applicable. |

SECTION 15: REGULATORY INFORMATION

Indication of Danger

Xn Harmful

SECTION 16: OTHER INFORMATION

The information on this Safety Data is correct to the best of our knowledge at the date of publication. However, the information should only be considered as a guide to safe handling, storage and possible use of the substance. We cannot accept liability for any loss, damage or injury which may result from its use. It is of paramount importance that all chemicals should be handled only by suitably qualified, competent personnel within a controlled environment. We shall ensure, so far as is reasonably practicable, that any revision of the Data Sheet is sent to all customers to whom we have directly supplied the material. Should any further information be required, please feel free to contact Epichem on +61 (8) 6167 5200

END OF MSDS