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MATERIAL SAFETY DATA SHEET

Polymixin B Sulfate

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifiers:

Product name: Polymixin B Sulfate

Product number: 0001405205

Brand : Discovery

Reach No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require registration or the registration is envisaged for a later

Registration deadline

Cas No. : 1405-20-5

1.1 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : laboratory chemicals, manufacture of substances

1.2 Details of the supplier of the safety data sheet

Company: Discovery Fine Chemicals Ltd
Unit 4A, Old Forge Road, Ferndown Ind. Estate,
Wimborne, Dorset, BH21 7RR.
United Kingdom

Telephone: +44 (0)1202 874517

Fax: +44 (0)845 0944 385

E-Mail: discovery@discofinechem.com

1.4 Emergency Telephone: +44 (0)7912 646956

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

Acute Oral (Category 4) H302

For the full text of the H statements mentioned in this section, see section 16

Classification according to European Directives 67/548/EEC or 1999/45/EC

Classification according to EU Directives 67/548/EEC or 1999/45/EC

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Warning Word: Warning

Hazard Statement(s)

H302 Harmful if swallowed.

Precautionary Statements

P264 Wash skin thoroughly

P270 do not eat, drink, or smoke while using this product

P301 + P312 IF SWALLOWED, CALL A POISON CONTROL CENTER IF YOU FEEL UNWELL

P501 Dispose of Contents at an Approved Waste Disposal Company

P362 + P364 remove contaminated clothing and wash it before reusing it

Additional Hazard Statement: None

2.3 Other Hazards

This substance/mixture does not contain any components that are considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or greater.

SECTION 3. COMPOSITION/INGREDIENT INFORMATION

3.1 Substances

Formula : C55H96N16O13·2H2SO4

Molecular Weight : 1385,61 g/mol

Cas No: 1405-20-5

E.C.No: 215-774-7

Component

Polymixin b sulfate

CAS-No.1405-20-5

E.C.No. 215-774-7

Classification

ACUTE TOX.4

H302

Concentration

<=100%

For the full text of the H statements mentioned in this section, see section 16.

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice

Show this safety data sheet to the treating physician.

If inhaled - If inhaled, move the person to fresh air.

In case of skin contact – Remove all contaminated clothing. Rinse the skin with water. Consult a doctor.

In case of eye contact - Rinse thoroughly with water for at least 15 minutes and seek medical attention.

If swallowed - After swallowing, make the victim drink water. Consult a doctor.

4.2 Most significant, acute and delayed symptoms and effects – the most significant known symptoms and effects are described on the label (see section 2.2 and/or section 11).

4.3 Indication of any immediate medical attention and special treatment required

No data available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing agent

Suitable extinguishing agent - water foam, carbon dioxide (CO₂), dry powder.

Unsuitable extinguishing agent – for this substance, no limitation of extinguishing agents is given.

5.2 Specific hazards arising from the material or mixture

Carbon oxides

nitrogen oxides (NO_x)

Sulphur oxides

Fuel

Possible development of hazardous combustion gases or vapours in the event of a fire.

5.3 Advice to Firefighters – Only stay in a hazardous area with a self-contained breathing apparatus. Avoid skin contact by keeping a safe distance or wearing appropriate protective clothing.

5.4 Additional information - no data available.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area. For personal protection see section 8.

6.2 Environmental precautions - Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up – pick up and arrange disposal without creating dust. Sweep and shovel up. Keep in suitable closed containers for disposal.

6.4 Reference to other sections - For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling

See section 2.2

7.2 Safe storage conditions, including possible incompatibilities

Store in a cool place. Keep the container tightly closed in a dry, well-ventilated place.

Recommended storage temperature: 2 - 8 °C. Light sensitive.

Storage class (TRGS510): 11: combustible solids.

7.3 Specific end use(s) - no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls - Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection - Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection - Handle with gloves. Gloves must be inspected prior to use.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested:KCL 741 Dermatril®

Splash protection

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested:Dermatril®

Body Protection - Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection -For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Basic Physical and Chemical Properties Information

- a) Appearance - Form: powder, Colour: white – off-white
 - b) Odour - no data available
 - c) Odour threshold - no data available
 - d) Melting point/freezing point – no data available
 - e) Initial boiling point and boiling range - no data available
 - f) Flammability (solid, gas) - no data available
 - (g) Upper or lower flammability or explosive limits - no data available
 - h) Flash point – not applicable
 - i) Auto-ignition temperature - no data available
 - (j) Decomposition temperature - no data available
 - k) pH - no data available
 - l) Viscosity – viscosity, kinematics: no data available
- viscosity dynamics: no data available
 - m) Water solubility – NO DATA AVAILABLE
 - (n) Partition coefficient: log Pow: no data available
 - (o) Vapour pressure - no data available
 - p) Density - no data available
Relative density – no data available
 - (q) Relative vapour density - no data available
 - (r) Particulate characteristics - no data available
 - s) Explosive properties – no data available
 - t) Oxidative properties - no data available
- 9.2 Other safety information - no data available

10. STABILITY AND RESPONSIVENESS

10.1 Responsiveness

The following applies in general to flammable organic substances and mixtures: in such a fine distribution that one can generally assume an explosion of dust when it is projected upwards.

10.2 Chemical Stability

The product is chemically stable under standard ambient conditions (room temperature)

10.3 Potential for Hazardous Reactions

No data available

10.4 Conditions to Avoid

No data available

10.5 Incompatible Materials

Powerful oxidizing agents, bases

10.6 Hazardous decomposition products

In the event of a fire, see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Toxicological effects information

Acute toxicity

Oral LD50 – mice 790 mg/kg

Remarks (RTECS)

Inhalation – no data available

Dermal – no data available

Skin corrosion/irritation - no data available

Severe eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Suction risk

No data available

11.2 Additional Information

Endocrine disrupting properties

Product

Evaluation

The substance/mixture does not contain components considered to have endocrine disrupting properties in accordance with Article 57(f) of REACH, Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0,1 % or more.

RTECS: TR1150000

Vomiting, diarrhoea, abdominal pain. To our knowledge, the chemical, physical and toxicological properties have not been studied thoroughly.

12. ECOLOGICAL INFORMATION

12.1 Toxicity - no data available

12.2 Persistence and degradability - no data available

12.3 Bioaccumulative potential - no data available

12.4 Mobility in soil - no data available

12.5 PBT and vPvB Assessment Results

This substance/mixture does not contain any components that are considered to be persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or greater.

12.6 Endocrine disrupting properties

Product

Evaluation

The substance/mixture does not contain components considered to have endocrine disrupting properties in accordance with Article 57(f) of REACH, Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0,1 % or more.

12.7 Other adverse reactions

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Product

Waste must be disposed of in accordance with state and local regulations. Leave chemicals in their original containers. No mixing with other waste. Handle uncleaned containers as the product itself in accordance with the Waste Directive 2008/98/EC.

14. TRANSPORTATION INFORMATION

14.1 UN Number

ADR/RID: - IMDG: - IATA: -

14.2 UN Proper Shipping Name

ADR/RID: Non-Dangerous Goods

IMDG: Non-Dangerous Goods

IATA: Non-Dangerous Goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packing Group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for the user

More information

Not classified as dangerous under the transport regulations

15. REGULATORY INFORMATION

15.1 Substance- or mixture-specific safety, health and environmental regulations/legislation

This safety data sheet complies with the requirements of Regulation (EC) No 1907/2006.

Other regulations

Comply with maternity protection restrictions at work in accordance with Directive 92/85/EEC or stricter national regulations, where applicable.

Taking note of Directive DIR 94/33/EC on the protection of young people at work

15.2 Chemical Safety Assessment –

For this product, no chemical safety assessment has been carried out.

16. OTHER INFORMATION

Text of the H-code(s) and the R-in/will be sentence(s) mentioned in § 2 and 3

H302 Harmful if swallowed.

More information

GUARANTEE

The above information is believed to be correct, but does not claim to be exhaustive and should be used for information purposes only. The information contained in this document is based on the current state of our knowledge and is applicable to the product.

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**APPENDIX
ABBREVIATIONS FULL TEXT**

ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR European Agreement concerning the International Carriage of Dangerous Goods by Road
ALARP As low as is reasonably practicable
CAS Chemical Abstracts Service
CLP Classification, Labelling and Packaging Regulations
COSHH Control of Substances Hazardous to Health **EC Number** European Community Number
EC50 Effective Concentration 50%
ECHA European Chemicals Agency
ELINCS European List of Notified Chemical Substances
EINECS European Inventory of Existing Commercial Chemical Substances **GHS** Globally Harmonised System
HSE Health & Safety Executive UK
IATA International Air Transport Association
IM Intramuscular
IMDG The International Maritime Dangerous Goods Code
IP Intraperitoneal
IV Intravascular
LD50 Lethal Dose 50%
LOEC Lowest Observable Effective Concentration
LTEL Long Term Exposure Limit
NOEC No Observable Effective Concentration
OECD Organisation for Economic Cooperations and Development
OSHA European Agency for Safety and Health at work
PBT Persistent Bioaccumulative and Toxic substance
PPE Personal Protective Equipment
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals
RID Regulations Concerning the International Carriage of Dangerous Goods by Rail
SC Subcutaneous
SDS Safety Data Sheet
SIEF Substance Information Exchange Forum
STEL Short Term Exposure Limit
STOT (RE) Specific Target Organ Toxicity – repeated exposure
STOT (SE) Specific Target Organ Toxicity – single exposure
SVHC Substance of Very High Concern
VOC Volatile Organic Compounds
vPvB Very Persistent and Very Bioaccumulative
WEL Workplace Exposure Limits