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ISO 9001: 2015

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 PRODUCT IDENTIFIERS

Penicillinase, from bacillus cereus (lyophilized powder, 1,500-3,000 units/mg protein)

Code P 1394

2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Not a hazardous product according to Regulation n.1272/2008.

2.2 LABEL ELEMENTS

Not applicable. Mixture classified as not hazardous according to Regulation n.1272/2008.

2.3 OTHER HAZARDS

Not known.

3. COMPOSITION/INFORMATION ON THE INGREDIENTS

3.1 SUBSTANCES

Synonyms: Beta-lactam hydrolase (EC: 3.5.2.6)

CAS Number: 9073-60-3

EC Number: 232-628-8

4. FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

Recommended to wear personal protective equipment for first aid.

In case of inhalation

Provide fresh air

In case of skin contact

Wash with soap and water

In case of eye contact

Wash out eyes with plenty of water

In case of ingestio

Wash out mounth with water. Give to the victim 1 or 3 glasses of water in order to dilute stomach conten

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

No additional information available.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

No additional information available.

5. FIREFIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

The product is not combustible. Use extinguishing systems compatible with the local situation and with the surrounding environment.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Nature of decomposition products not known.

5.3 ADVICE FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

For non-emergency personnel

Wear suitable protective equipment. Don't breathe the vapors, evacuate the danger area.

For emergency responders

Use protective devices.

See section 8.

6.2 ENVIRONMENTAL PRECAUTIONS

Prevent entry to sewers and public waters.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Sweep up and dispose properly.

6.4 REFERENCE TO OTHER SECTIONS

For individual protection, refer to section 8. For information about waste, refer to section 13.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Ensure good ventilation of the workstation where dust is formed. Handle in accordance with good industrial hygiene and safety procedures.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. The correct storage

refers to intact product in its tightly closed package.

Recommended storage temperature: -25/+8 °C

7.3 SPECIFIC END USE(S)

No additional information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

No additional information available.

8.2 EXPOSURE CONTROLS

Appropriate engineering controls

Wear protective clothing. See section 7.1.

Individual protection measures, such as personal protective equipment

Personal protective equipment must be chosen in accordance with cen standards and with the supplier of personal protective equipment.

Eye protection

Wear compliant safety glasses.

Skin protection

Wear protective gloves. Wear disposable coveralls.

Respiratory protection

Wear disposable mask.

Thermal hazards

Not applicable

Environmental exposure controls

Do not let the product flow into the drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Lyophilized, white powder

Odour

Not available

Odour threshold

Not available

pH

Not available

Melting point/freezing point

Not available

Boiling point

Not available

Flash point

Not available

Evaporation rate

Not available

Flammability

Not available

Vapour pressure

Not available

Vapour density

Not available

Relative density

Not available

Solubility

Not available

Partition coefficient

Not available

Auto-ignition temperature

Not available

Decomposition temperature

Not available

Viscosity

Not available

Explosive properties

Not available

Oxidising properties

Not available

9.2 OTHER SAFETY INFORMATION

No additional information available

10. STABILITY AND REACTIVITY

10.1 REACTIVITY

No data available.

10.2 CHEMICAL STABILITY

The product is stable if store in adequate conditions (see section 7.2).

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No data available.

10.4 CONDITIONS TO AVOID

The product is stable if store in adequate conditions (see section 7.2).

10.5 INCOMPATIBLE MATERIALS

Strong oxidizing agents.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

In case of fire see section 5.

11. TOXOLOGICAL INFORMATIO

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

Acute toxicity

The product doesn't represent acute toxicity in base of known information.

Skin corrosion/irritation Not identified.

Respiratory or skin sensitisation

Not identified.

Germ cell mutagenicity

Not identified.

carcinogenicity

Not identified.

Reproductive toxicity	Not identified.
STOT-single exposure	Not identified.
STOT-repeated exposure	Not identified.
Aspiration hazard	Not identified.

12. ECOLOGICAL INFORMATION

12.1 TOXICITY

No data available.

12.2 PERSISTENCE AND DEGRADABILITY

No data available.

12.3 BIOACCUMULATION POTENTIAL

No data available.

12.4 MOBILITY IN SOIL

No data available.

12.5 RESULTS OF PBT AND vPvB ASSESSMENT

No data available.

12.6 OTHER ADVERSE EFFECTS

No data available.

13 DISPOSAL CONSIDERATION

13.1 WASTE TREATMENT METHODS

Do not disperse the product in the environment.

Dispose in a safe manner in accordance with local/national regulations.

14. TRANSPORT INFORMATION

14.1 UN NUMBER

Not applicable.

14.2 UN PROPER SHIPPING NAME

Not applicable.

14.3 TRANSPORT HAZARD CLASS(ES)

Not applicable.

14.4 PACKAGING GROUP

Not applicable.

14.5 ENVIRONMENTAL HAZARDS

ADR Not dangerous goods according to the current regulation.

RID Not dangerous goods according to the current regulation.

ADN Not relevant.

IATA Not dangerous goods according to the current regulation.

IMDG Not dangerous goods according to the current regulation.

14.6 SPECIAL PRECAUTIONS FOR USER

Not dangerous goods according to the current regulation.

14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL AND THE IBC CODE

No data available.

15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

This safety data sheet is in compliance to the Regulation (UE) 2015/830.

15.2 CHEMICAL SAFETY ASSESSMENT

Chemical safety assessment is not required for this product.

Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.