

# Chemical Safety Data Sheet MSDS / SDS

## ENTEROTOXIN TYPE B, STAPHYLOCOCCUS AUREUS

Revision Date:2026-05-30 Revision Number:1

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

#### Product identifier

Product name : ENTEROTOXIN TYPE B, STAPHYLOCOCCUS AUREUS  
CBnumber : CB2487614  
CAS : 11100-45-1  
Synonyms : SEB,STAPHYLOCOCCAL ENTEROTOXIN B

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

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.  
Uses advised against : none

#### Company Identification

Company : Chemicalbook  
Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing  
Telephone : 010-86108875

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### SECTION 2: Hazards identification

#### GHS Label elements, including precautionary statements

Symbol(GHS)



Signal word

Danger

#### Precautionary statements

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continuerinsing.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P262 Do not get in eyes, on skin, or on clothing.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

#### Hazard statements

H319 Causes serious eye irritation

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### SECTION 3: Composition/information on ingredients

#### Substance

Product name : ENTEROTOXIN TYPE B, STAPHYLOCOCCUS AUREUS  
Synonyms : SEB,STAPHYLOCOCCAL ENTEROTOXIN B  
CAS : 11100-45-1

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## SECTION 4: First aid measures

### General advice

First aiders need to protect themselves. Show this safety data sheet to the doctor in attendance.

### If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

### In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

### If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

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

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

### Protection of first-aiders

For personal protection see section 8.

### Notes to physician

No data available

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## SECTION 5: Firefighting measures

### Suitable extinguishing media

Water Foam Carbon dioxide (CO<sub>2</sub>) Dry powder

### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

### Specific hazards during fire fighting

Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.

## **Hazardous combustion products**

Oxides of phosphorus Sodium oxides

## **Specific extinguishing methods**

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## **Special protective equipment for fire-fighters**

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

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# SECTION 6: Accidental release measures

## **Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: For personal protection see section 8.

## **Environmental precautions**

Do not let product enter drains.

## **Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

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# SECTION 7: Handling and storage

## **Handling**

### **Advice on safe handling**

Work under hood. Do not inhale substance/mixture.

### **Avoidance of contact**

Strong oxidizing agents

## **Storage**

### **Further information on storage conditions**

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons.

### **Storage class**

6.1A, Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

### **Recommended storage temperature**

2 - 8 °C

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# SECTION 8: Exposure controls/personal protection

### **Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

### **Engineering measures**

No data available

### **Personal protective equipment**

#### **Respiratory protection**

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

#### **Recommended Filter type**

Filter type P3

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

#### **Eye/face protection**

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

Safety glasses

#### **Skin and body protection**

protective clothing

#### **Hygiene measures**

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

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## SECTION 9: Physical and chemical properties

### **Information on basic physicochemical properties**

solid

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#### **Color**

No data available

#### **Odor**

No data available

#### **Odor Threshold**

No data available

#### **pH**

No data available

#### **Melting point/ range**

No data available

**Boiling point/boiling range**

No data available

**Flash point**

Not applicable

**Evaporation rate**

No data available

**Flammability (solid, gas)**

No data available

**Flammability (liquids)**

No data available

**Burning rate**

No data available

**Upper explosion limit / Upper flammability limit**

No data available

**Lower explosion limit / Lower flammability limit**

No data available

**Vapor pressure**

No data available

**Relative vapor density**

No data available

**Relative density**

No data available

**Density**

No data available

**Water solubility**

in all proportions

**Partition coefficient: n-octanol/water**

No data available

**Autoignition temperature**

No data available

**Decomposition temperature**

No data available

### **Viscosity, dynamic**

No data available

### **Viscosity, kinematic**

No data available

### **Flow time**

No data available

### **Explosive properties**

Not classified as explosive.

### **Oxidizing properties**

none

### **Particle characteristics Particle size**

No data available

### **Physical state**

Solid

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## SECTION 10: Stability and reactivity

### **Reactivity**

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

### **Chemical stability**

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

### **Possibility of hazardous reactions**

No data available

### **Conditions to avoid**

Avoid heating above: 100°C no information available

### **Incompatible materials**

Strong oxidizing agents

### **Hazardous decomposition products**

In the event of fire: see section 5

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Mixture Acute toxicity

Oral: No data available

Acute toxicity estimate Inhalation - 4 h - 0.02 mg/l - dust/mist (Calculation method)

Symptoms: Possible symptoms: mucosal irritations, Cough, Shortness of breath,

Possible damages: damage of respiratory tract

Acute toxicity estimate Dermal - 20 mg/kg (Calculation method)

#### Skin corrosion/irritation

Remarks: Mixture causes skin irritation.

#### Serious eye damage/eye irritation

Remarks: Mixture causes serious eye irritation.

#### Respiratory or skin sensitization

Classified based on available data. For more details, see section 2

#### Germ cell mutagenicity

Classified based on available data. For more details, see section 2

#### Carcinogenicity

Classified based on available data. For more details, see section 2

#### Reproductive toxicity

Classified based on available data. For more details, see section 2

#### Specific target organ toxicity - single exposure

Mixture may cause respiratory irritation.

#### Specific target organ toxicity - repeated exposure

Classified based on available data. For more details, see section 2

#### Aspiration hazard

Classified based on available data. For more details, see section 2

### 11.2 Additional Information

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

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

Handle in accordance with good industrial hygiene and safety practice.

#### Components tri-sodium phosphate

##### Acute toxicity

LD50 Oral - Rat - female - > 2,000 mg/kg (OECD Test Guideline 420)

LC50 Inhalation - Rat - male and female - 4 h - > 0.83 mg/l - dust/mist (OECD Test Guideline 403)

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: sodium dihydrogen phosphate

LD50 Dermal - Rat - male and female - > 2,000 mg/kg (OECD Test Guideline 402)

##### Skin corrosion/irritation

Remarks: Irritating to skin.

Remarks: (ECHA)

### **Serious eye damage/eye irritation**

Eyes - Rabbit

Result: Causes serious eye irritation.

(US-EPA)

Remarks: (ECHA)

### **Respiratory or skin sensitization**

Local lymph node assay (LLNA) - Mouse

Result: negative (OECD Test Guideline 429)

### **Germ cell mutagenicity**

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Result: negative

Test Type: Micronucleus test

Test system: Human lymphocytes

Result: negative

### **Carcinogenicity**

Classified based on available data. For more details, see section 2

### **Reproductive toxicity**

Classified based on available data. For more details, see section 2

### **Specific target organ toxicity - single exposure**

Inhalation - May cause respiratory irritation.

### **Specific target organ toxicity - repeated exposure**

Classified based on available data. For more details, see section 2

### **Aspiration hazard**

Classified based on available data. For more details, see section 2

## **Staphylococcal enterotoxin B Staphylococcus aureus**

### **Acute toxicity**

LD50 Oral - Human - 0.00002 mg/kg

Remarks: (External MSDS)

LC50 Inhalation - Human - 0.000004 mg/l - dust/mist

Remarks: (External MSDS)

Acute toxicity estimate Dermal - 5.1 mg/kg (Expert judgement)

### **Skin corrosion/irritation**

Classified based on available data. For more details, see section 2

### **Serious eye damage/eye irritation**

Remarks: Causes serious eye irritation.

(Lit.)

### **Respiratory or skin sensitization**

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

### **Germ cell mutagenicity**

Classified based on available data. For more details, see section 2

### **Carcinogenicity**

Classified based on available data. For more details, see section 2

### **Reproductive toxicity**

Classified based on available data. For more details, see section 2

#### **Specific target organ toxicity - single exposure**

Classified based on available data. For more details, see section 2

#### **Specific target organ toxicity - repeated exposure**

Classified based on available data. For more details, see section 2

#### **Aspiration hazard**

Classified based on available data. For more details, see section 2

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## SECTION 12: Ecological information

### **Ecotoxicity**

#### **Components:**

##### **tri-sodium phosphate:**

#### **Toxicity to fish**

LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l End point: mortality Exposure time: 96 h Test Type: semi-static test Analytical monitoring: yes Method: OECD Test Guideline 203 GLP: yes

#### **Toxicity to daphnia and other aquatic invertebrates**

EC50 (Daphnia magna (Water flea)): > 100 mg/l End point: Immobilization Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202 GLP: yes

#### **Toxicity to algae/aquatic plants**

ErC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l Exposure time: 72 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 201 GLP: yes

#### **Toxicity to microorganisms**

EC50 (activated sludge): > 1,000 mg/l Exposure time: 3 h Test Type: static test Method: OECD Test Guideline 209 GLP: yes Remarks: (in analogy to similar products) The value is given in analogy to the following substances: dipotassium hydrogen phosphate

### **Persistence and degradability**

#### **Components:**

##### **tri-sodium phosphate:**

#### **Biodegradability**

Remarks: The methods for determining the biological degradability are not applicable to inorganic substances.

### **Bioaccumulative potential**

#### **Components:**

##### **tri-sodium phosphate:**

#### **Partition coefficient: noctanol/water**

Remarks: Not applicable for inorganic substances

### **Mobility in soil**

No data available

#### **Other adverse effects**

#### **Components:**

#### **tri-sodium phosphate:**

#### **Results of PBT and vPvB assessment**

PBT/vPvB: Not applicable for inorganic substances

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## SECTION 13: Disposal considerations

#### **Disposal methods**

#### **Waste from residues**

Offer surplus and non-recyclable solutions to a licensed disposal company.

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## SECTION 14: Transport information

#### **International Regulations**

#### **IATA-DGR**

UNID No. : UN 3462

Proper shipping name : Toxins, extracted from living sources, solid, n.o.s.

(Staphylococcal enterotoxin B Staphylococcus aureus)

Class : 6.1

Packing group : I

Labels : Division 6.1 - Toxic substances

Packing instruction (cargo aircraft) : 673

Packing instruction (passenger aircraft) : Not permitted for transport

#### **IMDG-Code**

UN number : UN 3462

Proper shipping name : TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S.

(Staphylococcal enterotoxin B Staphylococcus aureus)

Class : 6.1

Packing group : I

Labels : 6.1

EmS Code : F-A, S-A

Marine pollutant : no

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

Not applicable for product as supplied.

## National Regulations

### JT/T 617

UN number : UN 3462

Proper shipping name : TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S.

(Staphylococcal enterotoxin B Staphylococcus aureus)

Class : 6.1

Packing group : I

Labels : 6.1

Environmentally hazardous : no

### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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## SECTION 15: Regulatory information

Catalogue of Hazardous Chemicals : This product is not listed in the catalogue of hazardous chemicals, but it meets the definition of hazardous chemicals and its principles of determination.

Downstream users need to comply with the conditions of safe use of the chemical, understand the environmental and health hazard and risk management measures identified on the SDS as well as the local/national regulations concerning the chemical.

### National regulatory information

#### Regulations on Safety Management of Hazardous Chemicals

#### Identification of Major Hazard Installations for Hazardous Chemicals (GB 18218)

#### No. / Code Chemical name / Category Threshold quantity

J2 Acute toxic 50 t

#### Hazardous Chemicals for Priority Management

Not listed under SAWS

#### Catalogue of Specially Controlled Hazardous

Not listed Chemicals

#### List of Explosive Precursors

Not listed

#### Regulations on Labour Protection in Workplaces where Toxic Substances are Used

#### Catalogue of Highly Toxic Chemicals

Not listed

## **Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals**

### **China Severely Restricted Toxic Chemicals for Import and Export**

Not listed

## **Measures on the Environmental Administration of New Chemical Substances Registration**

### **Registration/Notification number**

B1A222243213

## **Regulation on the Administration of Precursor Chemicals**

### **Catalogue and Classification of Precursor Chemicals**

Not listed

## **Regulations on the Administration of Controlled Chemicals**

### **List of Controlled Chemicals**

Not listed

## **Regulations of Ozone Depleting Substances Management**

### **List of Controlled Ozone Depleting Substances**

Not listed

## **List of Controlled Ozone Depleting Substances Import and Export**

Not listed

## **Environmental Protection Law**

### **List of Priority Controlled Chemicals**

Not listed

## **List of Key Controlled New Pollutants**

Not listed

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## SECTION 16: Other information

### **Full text of other abbreviations**

AIIIC - Australian Inventory of Industrial Chemicals

ANTT - National Agency for Transport by Land of Brazil

ASTM - American Society for the Testing of Materials

bw - Body weight

CMR - Carcinogen, Mutagen or Reproductive Toxicant  
 DIN - Standard of the German Institute for Standardisation  
 DSL - Domestic Substances List (Canada)  
 EC<sub>x</sub> - Concentration associated with x% response  
 EL<sub>x</sub> - Loading rate associated with x% response  
 EmS - Emergency Schedule  
 ENCS - Existing and New Chemical Substances (Japan)  
 ErC<sub>x</sub> - Concentration associated with x% growth rate response  
 ERG - Emergency Response Guide  
 GHS - Globally Harmonised System  
 GLP - Good Laboratory Practice  
 IARC - International Agency for Research on Cancer  
 IATA - International Air Transport Association  
 IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
 IC<sub>50</sub> - Half maximal inhibitory concentration  
 ICAO - International Civil Aviation Organization  
 IECSC - Inventory of Existing Chemical Substances in China  
 IMDG - International Maritime Dangerous Goods  
 IMO - International Maritime Organisation  
 ISHL - Industrial Safety and Health Law (Japan)  
 ISO - International Organisation for Standardisation  
 KECI - Korea Existing Chemicals Inventory  
 LC<sub>50</sub> - Lethal Concentration to 50 % of a test population  
 LD<sub>50</sub> - Lethal Dose to 50% of a test population (Median Lethal Dose)  
 MARPOL - International Convention for the Prevention of Pollution from Ships  
 MERCOSUR - The Agreement for the Facilitation of the Transport of Dangerous Goods  
 n.o.s. - Not Otherwise Specified  
 Nch - Chilean Norm  
 NO(A)EC - No Observed (Adverse) Effect Concentration  
 NO(A)EL - No Observed (Adverse) Effect Level  
 NOELR - No Observable Effect Loading Rate  
 NOM - Official Mexican Norm  
 NTP - National Toxicology Program  
 NZIoC - New Zealand Inventory of Chemicals  
 OECD - Organisation for Economic Co-operation and Development  
 OPPTS - Office of Chemical Safety and Pollution Prevention  
 PBT - Persistent, Bioaccumulative and Toxic substance  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 (Q)SAR - (Quantitative) Structure Activity Relationship  
 REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals  
 SADT - Self-Accelerating Decomposition Temperature  
 SDS - Safety Data Sheet

TCSI - Taiwan Chemical Substance Inventory

TDG - Transportation of Dangerous Goods

TECI - Thailand Existing Chemicals Inventory

TSCA - Toxic Substances Control Act (United States)

UN - United Nations

UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods

vPvB - Very Persistent and Very Bioaccumulative

WHMIS - Workplace Hazardous Materials Information System

**Disclaimer:**

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.