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İç ve Dış Ticaret San. Ltd. Şti.

## **SAFETY DATA SHEET**

Cholesterol esterase

### **1- Product name and supplier**

- Product name:** Cholesterol esterase
- Chemical name:** Steryl-ester acylhydrolase - EC 3.1.1.13
- Code:** **KCHE-100E**
- Supplier:** KATALİZMED İç ve Dış Ticaret San.LTD.ŞTI  
Çınar Mah. 5003/2 Sk. No:3-5  
İç Kapı No:510 Bornova /izmir  
Hasan Tahsin 5281355470

**-REACH N°:** 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 a registration or the registration is envisaged for a later registration deadline.

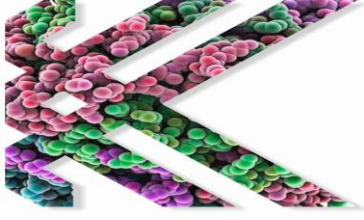
**-Identified uses:** Laboratory chemicals, Manufacture of substances

### **2- Hazard identification**

#### **-Classification of the substance or mixture**

Acute toxicity, Oral (Category 5), H303 Skin irritation (Category 2), H315 Serious eye damage (Category 2A), H319 Reproductive toxicity (Category 1B), H360 Specific target organ toxicity, single exposure, H370 Specific target organ toxicity, repeated exposure, H372

For the full text of the H-Statements mentioned in this Section, see Section 16.



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Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word Danger

Hazard statement(s)

H303 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H360 May damage fertility or the unborn child

H370 Causes damage to organs

H372 Causes damage to organs through prolonged or repeated exposure

**-Other hazards** - none

Precautionary statement(s)

P202: Do not handle until all safety precautions have been read and understood.

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

P271: Use only outdoors or in a well-ventilated area.

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

P270: Do not eat, drink or smoke when using this product

P264: Wash hands thoroughly after handling

P304+P340: IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.

P314: Get medical advice/attention if you feel unwell

P305+P352+P362: If in eyes: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.

P302+P352+P362: If in eyes: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.

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P332+P313: IF SKIN irritation occurs: Get medical advice/attention.

P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: IF eye irritation persists: Get medical advice/attention.

P308+P3013: IF exposed or concerned: Get medical advice/attention.

P405: Store locked up.

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P501: Dispose of contents/container in accordance with local/regional/national/international/regulation.

### **3- Composition/information on ingredients**

CAS-N°: 9026-00-0

EC-N°: 232-808-6

Ingredient contributing to the Hazard:

Boric acid: 10%

Chemical formula:  $H_3BO_3$

CAS: 10043-35-3

Triton X-100: 6%

Chemical formula:  $C_8H_{17}-C_6H_4O(C_2H_4O)_nH$

CAS: 9002-93-1

### **4- First aid measures**

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- Eyes contact** Flush eyes with water for at least 15 min and seek medical advice
- Skin contact** Flush area with plenty of water
- Inhalation** Provide fresh air. If breathing is difficult, obtain medical attention. If not breathing, give artificial respiration
- Ingestion** Never give anything by mouth to an unconscious person. Rinse mouth with water.

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

The most important known symptoms and effects are described in the labelling and/or in section 11.

**Indication of any immediate medical attention and special treatment needed**  
no data available

### **5- Fire-fighting measures**

#### **-Extinguishing media**

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

#### **-Special hazards arising from the substance or mixture**

Nature of decomposition products not known.

#### **-Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

#### **-Further information**

no data available

### **6- Accidental release measures**

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

Avoid dust formation. Avoid breathing vapors, mist or gas.

### **-Environmental precautions**

Do not let product enter drains.

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

Sweep up and shovel. Keep in suitable, closed containers for disposal.

## **7- Handling and storage**

### **-Handling**

Work in mechanically exhausted area  
Protective rubber or latex gloves needed  
Wear safety glasses or goggles

### **-Storage**

Store in a dry place at -20 °C in a firmly tighten recipient

## **8- Exposure controls/personal protection**

### **-Control parameters**

Components with workplace control parameters

### **-Exposure controls**

Boric acid: TLV: TWA 2mg/m<sup>3</sup>, STEL 6mg/m<sup>3</sup>

### **Appropriate engineering controls**

General industrial hygiene practice.

### **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).

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### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.  
Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

### **Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### **Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## **9- Physical and chemical properties**

Appearance	light brown powder, lyophilized
Odour	no data available
pH	7.5 (1%)
Melting point/freezing point	no data available
Flash point	no data available
Evaporation rate	no data available
explosive limits	no data available

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Vapour pressure	no data available
Vapour density	no data available
Relative density	no data available
Water solubility	no data available
Autoignition temperature	no data available
Decomposition temperature	no data available
Viscosity	no data available

### **10- Stability and reactivity**

#### **-Reactivity**

no data available

#### **-Chemical stability**

no data available

#### **-Possibility of hazardous reactions**

no data available

#### **-Conditions to avoid**

no data available

#### **-Incompatible materials**

no data available

#### **-Hazardous decomposition products**

Other decomposition products - no data available

### **11- Toxicological information**

#### **Boric acid**

#### **Acute toxicity**

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## **SAFETY DATA SHEET**

Rat LD50 2600mg/kg

### **Skin corrosion/irritation**

Moderate irritation (guinea pig, 24h, 72h)

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

Rubefaction / Pain

### **Respiratory or skin sensitization**

no data available

### **Germ cell mutagenicity**

no data available

### **Carcinogenicity**

ACGIH (2005) Category A4

### **Reproductive toxicity**

Adverse effects on reproduction of parental animals and development of pups at doses producing no parental toxicity.

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

Human: Gastrointestinal tract effects such as nausea, vomiting, abdominal pain and diarrhea, and central nerve effects such as lethargy, headaches, fever, increased irritability and muscle convulsion. Irritation of upper respiratory tract

Animal: cyanosis within the guidance value ranges for Category 1.

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

Human: oliguresis, anuria and nephropathy including renal tubular necrosis.

### **Triton X-100**

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

Rabbit eye irritation was observed, and the symptoms had been healed within 21 days (ECETOC TR 48 (2))

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### -Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher

### 12- Ecological information

No information available on the product in toxicity, however, the information on the boric acid and Triton X-100 is shown below.

Boric acid	
Ecotoxicity	Algae (Pseudokirchneriella subcapitata) 72hr LC50 = 290mg/L Crustacea (Daphnia magna) 48hr LC50 = 133 mg/L (asboron) Fish (Coho salmon) 96hr LC50 = 447 mg/L Fish (Rainbow trout) 87days NOEC = 2.1 mg/L
Bioaccumulative potential	Considered not bioaccumulative
Triton X-100	
Ecotoxicity	LC50/96hr = 3mg/L (bluegill)
Persistence /Degradability	Persistent substance: 22% by BOD (National Institute of Technology and Evaluation, Japan)
Enzyme and other organic ingredients are biodegradable and does not remain on the environment for long.	

### -Endocrine disrupting properties

no data available

### 13- Disposal considerations

#### Waste treatment methods

#### Product

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

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### **Contaminated packaging**

Dispose of as unused product

### **14- Transport information**

#### **RID/ADR**

Non-hazardous for road transport.

#### **IMDG**

Non-hazardous for sea transport.

#### **IATA**

Non-hazardous for air transport

### **15- Regulatory information**

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

#### **Safety, health and environmental regulations/legislation specific for the substance or mixture**

no data available

#### **Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

### **16- Other information**

The information herein is based on the current extend of our knowledge and is believed to be correct but is provided without warranty of any kind. The recipient of our reagent is responsible for observing all applicable laws and regulations.

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