

## SAFETY DATA SHEET

Prepared in accordance to article 31 of EU regulation 1907/2006/EC  
Generic SDS – No Country Specific Data

### 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product Identifier

Product Name: Zymolyase®-20T  
Product Number(s): GE013.0001  
Brand: GRiSP  
REACH No. N/A

#### 1.2 Relevant identified uses of the substance/mixture and uses advised against:

Identified uses: Laboratory chemicals, for research only.  
Uses advised against: Not intended for human or animal diagnostics, therapeutics or other clinical uses.

#### 1.3 Company/Undertaking Identification

Company: GRiSP, Lda.  
Edifício Central do UPTEC  
Rua Alfredo Allen, 455|461  
4200-135 PORTO, Portugal  
Tel: +351-220301599  
Fax: +351-220301597  
E-mail: info@grisp.pt

#### 1.4 Emergency telephone number:

Emergency telephone number: +351-808 250143 (Poison Information Centre, CIAV, Lisbon) or check local emergency contact information

### 2 Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008

Not a hazardous substance or mixture

#### 2.2 Label elements

##### Labelling according to Regulation (EC) No. 1272/2008

None

#### 2.3 Other hazards

None

### 3 Composition/information on ingredients

**3.1 Description:** Enzyme for the production of protoplasts and spheroplasts of various yeast strains

**3.2 Chemical Characterization:** Substances

**Synonyms:** Zymolyase, Lyticase,  $\beta$ -1,3-glucan laminaripentaohydrolase

**CAS-No:** 37340-57-1

**Ec-No:** 609-409-4

3.2.1 This product does not contain any component that, at the given concentration is considered hazardous as specified in Regulation (EC) No 1272/2008.

### 4 First aid measures

#### 4.1 Description of First aid measures:

General information: Consult a physician. Show this safety data sheet to the doctor in attendance  
Inhalation: If inhaled, move exposed person to fresh air. If not breathing, begin artificial respiration immediately and obtain medical attention.

Eye contact:	In case of contact with eyes, rinse with plenty of water for at least 15 minutes. Remove contact lenses. If pain or irritation occurs obtain medical attention.
Skin contact:	In case of contact with skin, flush with copious amounts of water for at least 15 minutes. If pain or irritation occurs, obtain medical attention.
Ingestion:	If swallowed, immediately make victim drink water (two glasses at most). Consult a physician.

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

Not applicable

**4.3 Indication of any immediate medical attention and special treatment needed**

No specific medical attention or treatment required

**5 Fire-fighting measures**

**5.1 Extinguishing Media :**

CO<sub>2</sub>, powder or water spray or alcohol resistant foam.

**5.2 Special hazards arising from the substance or mixture**

**Special Fire and Explosion Hazards**

None.

**6 Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures:**

Avoid contact with skin, eyes and clothing. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

**6.2 Environmental Precautions:**

Avoid spill to prevent migration. Do not allow product to enter drains. Dispose of contents/container in accordance to national and local regulations.

**6.3 Methods and material for containment and cleaning up:**

Place in container suitable for disposal.

**7 Handling and storage**

**7.1 Handling:**

Avoid skin and eye contact. Provide appropriate exhaust ventilation at places where dust is formed.

**7.2 Storage:**

According to product specifications.

**7.3 Specific end uses:**

No further relevant information available

**8 Exposure controls/personal protection**

**8.1 Control Parameters**

**8.2 Exposure Controls**

This product is for research only and has not been intended/approved for any other commercial, drug, medicinal, household or other consumer purposes. Avoid all unnecessary exposure. Wear tightly fitting safety goggles, suitable protective clothing, and gloves. Do not wear contact lenses. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Handle in accordance with good industrial hygiene and safety practice.



Protective gloves



Tightly sealed goggles



Protective work clothing

**Appropriate Engineering Controls.** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

## 9 Physical and chemical properties

9.1. Physical State:	Solid, Powder
9.2. Appearance:	Beige
9.3. Odor:	Odorless
9.4. pH (25°C):	Undetermined
9.5. Flash Point:	Undetermined
9.6. Melting point:	Undetermined
9.7. Boiling point:	Undetermined
9.8. Self-ignition:	Product is not self-igniting
9.9. Danger of explosion:	Does not present an explosion hazard
9.10 Solubility in water:	Miscible

## 10 Stability and reactivity

<b>10.1</b> Reactivity	No dangerous reactions known.
<b>10.2</b> Chemical Stability	Stable.
<b>10.3</b> Conditions to avoid	Not established.
<b>10.4</b> Materials to avoid	No information available
<b>10.5</b> Conditions to avoid	No information available
<b>10.6</b> Hazardous decomposition products	Not expected to occur.
<b>10.7</b> Hazardous products of thermal decomposition:	No information available

## 11 Toxicological information

### 11.1 Information on toxicological effects

Acute Toxicity:	No data available
Irritation:	No data available
Corrosivity:	No data available
Sensitisation:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	No component of this product present is identified as probable possible or confirmed human carcinogen by IARC
Reproductive toxicity:	No data available
Specific target organ toxicity (single exposure):	No data available
Specific target organ toxicity (repeated exposure):	No data available
Aspiration hazard:	No data available

## 12 Ecological Information

### Toxicity

<b>12.1</b> Aquatic toxicity	No further relevant information available
<b>12.2</b> Persistence and degradability:	No further relevant information available
<b>12.3</b> Bioaccumulative potential	No further relevant information available
<b>12.4</b> Mobility in Soil:	No further relevant information available
<b>12.5</b> Other adverse effects:	No further relevant information available

### Results of PBT and vPvB assessment

This product does not contain any substances that are assessed to be a PBT or a vPvB

## 13 Disposal Considerations

Dispose in accordance to all National and local environmental regulations.

## 14 Transport Information

IATA/ADR/DOT-US/IMDG

Not regulated in the meaning of transport regulations

**14.1 UN number**

No dangerous good in sense of transport regulation

**14.2 UN proper shipping name**

Not applicable

**14.3 Additional information**

No supplementary information available

**Land transport ADR/RID (cross-border)**

Not dangerous goods

**Maritime transport IMDG**

Not dangerous goods

**Air transport ICAO-TI and IATA-DGR**

Not dangerous goods

## 15 Regulatory Information

**15.1 US Federal Regulations**

No additional information available

**15.2 International Regulations**

**EU Regulations**

No additional information available

**Classification according to Regulation (EC) No 1272/2008 [CLP]**

No additional information available

**15.3 National Regulations**

No additional information available

**15.4 US State Regulations**

No additional information available

**15.5 Other Regulations**

No additional information available

## 16 Other information

The information mentioned above is based on our present knowledge and is believed to be correct. However, it shall only be used as a guide and shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. GRISP, Lda. shall not be held liable for any damage resulting from the handling or from contact with the above product. This SDS has been prepared in accordance with EU Regulation 1907/2006/EC and other EU legislation in force.