

# SAFETY DATA SHEET

(RG, 13.12.2014, No-29204) It complies with the Regulation on Safety Data Sheets on Hazardous Substances and Mixtures.

<b>Substane/Mixture Name</b>	<a href="#">Glucose Oxidase</a>	<b>Regulation Date</b>	30.12.2024
		<b>Editing Date</b>	
<b>Form No</b>	111.233.87	<b>Number Of Editing</b>	1

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

### 1.1 Product Identifier

Product Name : [Glucose Oxidase](#)  
 Form No/GBF No : 111.233.87  
 Brand : [Qlp](#)  
 E Code : No additional information available.  
 EC No : 232-601-0  
 CAS No : 9001-37-0  
 Country of Origin : Türkiye (The origin of the main component is different from the origin of the final product).  
 Functional Class : Enzymes

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

Identified uses : Manufacturing of products in food and various industries.  
 Foods that can be added : It is used in permitted finished products, taking into account the relevant limitations, in accordance with the regulations in the Turkish Food Codex, Food Additives Regulation and vertical communiqué. If the food laws are not explained enough, please apply to the Food Law Authorities in your country.  
 Uses advised against : No additional information available.

### 1.3 Details of the supplier of the tds Identification of the company

Name of Food Manufacturer : Smart Chemistry Trade and Consulting Limited Company  
 Address of Food Manufacturer : 3AO, 8901/3 Street, Balatçık Neighborhood, Ege Industrial Site, Çiğli/İzmir  
 Central Address : 10016 Street No:18 AOSB Çiğli/İzmir  
 Manufacturer Registration Number : TR-35-K-047442  
 Telephone : 0850 441 00 22  
 Email Address : [s@hammaddeler.com](mailto:s@hammaddeler.com)  
 Websites : [hammaddeler.com](http://hammaddeler.com) - [gbf.com.tr](http://gbf.com.tr)

### 1.4 Emergency Phone Number

National Toxic Information Center (UZEM): 114

## SECTION 2. HAZARDS IDENTIFICATION

### 2.1 Classification of Substance and Mixture

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

Respiratory sensitization (Category 1) : H334

### 2.2 Label elements

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

Pictogram



Signal word (SEA) : Danger  
 Hazard Statements (SEA)  
 H334 : May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 Precautionary statement(s)  
 P261 : Avoid inhalation of dust/fumes/gases/mist/vapors/spray.  
 P284 : Wear respiratory protection (in case of inadequate ventilation).  
 P304+P340 : INHALATION: Remove the person to fresh air and place them in a position where they can breathe freely Hold on.  
 P342+P311 : If respiratory symptoms are experienced: Call Poison Center/doctor.  
 Supplemental Hazard Statements : None

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## 2.3 Other hazards

### Hazard precautions

May form explosive dust-air mixture when dispersed. This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3.COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Not applicable.

### 3.2 Mixtures

Component Name	EC No	CAS No	Concentration (%)	(RG, 11.12. 2013, No 28848) Classification in accordance with the "Regulation on Classification, Labeling and Packaging of Substances and Mixtures" (SEA)
Glucose Oxidase	232-601-0	9001-37-0	0.625 – 2.5	Res. Sens. 1; H334

## SECTION 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

In case of accident or illness, seek medical attention immediately (show instructions for use or safety data sheet if possible).

Remove the affected person from the danger area and lay him/her down.

Change contaminated, saturated clothing.

Do not leave the affected person unattended.

#### Following inhalation:

This mixture may cause acute irritation and/or sensitization of the respiratory tract, resulting in chest tightness, shortness of breath and asthma. May cause an allergic reaction. Remove the person to fresh air and allow them to breathe freely.

#### In case of skin contact:

In case of skin contact, immediately remove all contaminated clothing and wash with plenty of water.

#### After eye contact:

In case of eye contact, rinse with water for sufficient time with eyelids open and consult an ophthalmologist immediately.

#### Following ingestion:

DO NOT try to induce vomiting.

Rinse the mouth.

If you feel unwell, consult a doctor.

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

Symptoms : Allergic reactions

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

Immediate medical attention : Treat symptomatically.

## SECTION 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable extinguishing media

Water spray jet, Dry extinguishing powder, Carbon dioxide (CO<sub>2</sub>), alcohol resistant foam

#### Unsuitable extinguishing media

Full water jet

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

From the substance or preparation itself, from combustion products or their release Special exposure hazards arising from Gases

What may occur in case of fire: carbon monoxide, carbon dioxide (CO<sub>2</sub>), pyrolysis fog products, toxic.

May cause allergic reaction. May create flammable dust concentrations in the air.

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## 5.3 Advice for firefighters

Special protective equipment against fire fighting:

In case of fire: Wear self-contained breathing apparatus.

Additional information on fire fighting:

Do not allow water used to extinguish the fire to enter drains, soil or waterways. Treat the flow as dangerous.

## 5.4 Additional information

No additional information available.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

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

Use personal protective equipment.

Avoid dust formation.

Avoid inhalation of dust/fume/gas/mist/vapor/spray.

Ensure adequate ventilation, especially in closed rooms.

### 6.2 Environmental precautions

Avoid release into the environment.

Do not allow to enter surface waters or sewers.

Store and dispose of contaminated wash water.

### 6.3 Methods and material for containment and cleaning up

Remove leaked material dry using an explosion-proof vacuum cleaner or dampen with a broom and collect in suitable containers for disposal in accordance with local regulations (see section 13).

Ensure that waste is collected and contained.

Clean contaminated objects and floors in accordance with environmental legislation.

### 6.4 Reference to other sections

For disposal see section 13.

See protective measures in points 7 and 8.

## SECTION 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

It is recommended that all work processes are always designed to exclude Inhalation, skin, Eye contact, mouth.

Prevent dust formation.

Take precautions against static discharges.

Precautions:

Do not eat, drink or smoke while using.

Wash your hands before breaks and after work.

### 7.2 Conditions for safe storage, including any incompatibilities

Storage space and container requirements: Keep container tightly closed in a cool, well-ventilated place. Store in a dry place.

German storage class: 10-13

Recommended storage temperature: <25°C

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

## BÖLÜM 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Components with Workspace Control Parameters

The product is any material with critical values that must be monitored in the workplace. does not include.

### 8.2 Exposure controls

#### 8.2.1. Appropriate engineering controls

No additional information available.

#### 8.2.2. Personal protection equipment

##### Eye/face protection

Wear goggles with side protection in accordance with EN 166.

##### Skin and body protection

CE labeled protective clothing with four control numbers must be worn when working with chemicals.

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## Hand Protection

The quality of chemical resistant protective gloves depends on the specific concentration and quantity of hazardous substances in the workplace must be selected.

Protective gloves bearing the CE label with four check digits must be worn when handling chemicals.

## Respiratory protection

Do not inhale gas/vapor/aerosol.

Use self-contained breathing apparatus when respirable dust is generated.

Filter type: P3/FFP3.

## General protective and hygiene measures

Technical measures and the implementation of appropriate work processes, personal protective takes precedence over equipment.

### 8.2.3. Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Physical state	: Powder
Colour	: Yellow to slightly Brown
Odour	: Flour-like, slightly fermented
pH	: No additional information available.
Solubility	: No additional information available.
Initial boiling point and boiling range	: No additional information available.
Melting point/Freezing point	: No additional information available.
Flash Point	: No additional information available.
Evaporation Rate	: No additional information available.
Vapor Pressure	: No additional information available.
Relative density	: No additional information available.
Flammability	: No additional information available.
Enzyme Activity	: 2250 - 3000 u/g

### 9.2 Other information

No additional information available.

## SECTION 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No hazardous reactions occur when used and stored in accordance with the conditions.

### 10.2 Chemical stability

The product is stable when stored at normal ambient temperatures.

### 10.3 Possibility of hazardous reactions

Formation of explosive dust/air mixtures.

### 10.4 Conditions to avoid

Avoid high temperatures or direct sunlight.

Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. Smoking Prohibited.

### 10.5 Incompatible materials

Keep away from strongly acidic and alkaline materials and oxidizers.

### 10.6 Hazardous decomposition products

Hazardous decomposition products

Decomposition products in case of fire: see section 5.

## SECTION 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on Toxic Effects

#### Acute oral toxicity:

No additional information available.

#### Serious eye damage/irritation

No additional information available.

#### Skin corrosion/irritation

No additional information available.



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**Respiratory or skin sensitization:**

If inhaled, it can cause allergies, asthma symptoms or breathing difficulties.

**Germ cell mutagenicity:**

No additional information available.

**Carcinogenicity:**

No additional information available

**Reproductive toxicity**

No additional information available.

**Specific target organ toxicity – Single exposure:**

No additional information available.

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

No additional information available.

**Aspiration Toxicity:**

No additional information available.

## SECTION 12. ECOLOGICAL INFORMATION

**12.1 Toxicity**

No additional information available.

**12.2 Persistence and degradability**

No additional information available.

**12.3 Bioaccumulative potential**

No additional information available.

**12.4 Mobility in soil**

No additional information available.

**12.5 Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Disposal considerations**

Contain and dispose of waste according to local regulations.

**Contaminated packaging**

Dispose according to legislation.

## SECTION 14. TRANSPORT INFORMATION

**14.1. UN number or ID number**

ADR (Road)/RID (Rail) : Not applicable.

IMDG (Seaway) : Not applicable.

IATA (Airline) : Not applicable.

**14.2. UN proper shipping name**

ADR (Road)/RID (Rail) :

IMDG (Seaway) : Non dangerous good

IATA (Airline) : Non dangerous good

**14.3. Transport hazard class(es)**

ADR (Road)/RID (Rail) : Not applicable.

IMDG (Seaway) : Not applicable.

IATA (Airline) : Not applicable.

**14.4. Packing group**

ADR (Road)/RID (Rail) : Not applicable.

IMDG (Seaway) : Not applicable.

IATA (Airline) : Not applicable.

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## 14.5. Environmental hazards

ADR (Road)/RID (Rail) : Not applicable.  
IMDG (Seaway) : Not applicable.  
IATA (Airline) : Not applicable.

## 14.6. Special precautions for user

No dangerous good in sense of these transport regulations.

## Transport in bulk according to Annex II of MARPOL and the IBC Code

No additional information available.

## SECTION 15. REGULATORY INFORMATION

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1272/2008.

### 15.2. Chemical safety assessment

For this product a chemical safety assessment was not carried out

## SECTION 16. OTHER INFORMATION

### Waiver Statement

The information presented in this safety data sheet is based on the information we already have. Although the information is reliable, it should not be considered accurate and complete. The prepared safety data sheet does not constitute a guarantee and should be used as a guide. This information has been prepared specifically for the substance or mixture in question, and may not be valid for compounds and processes made with other substances. and may vary depending on other raw materials; For this reason, the person or institution purchasing the products freely decides to use the product after evaluating its suitability for its own use, its impact on environmental conditions, its effects on occupational health and safety. Hammaler.com, Smart Kimya Tic. and Dan. Ltd. Şti., our representatives and solution partners cannot be held responsible for the use of this information.