

## 1. IDENTIFICATION

### 1.1 Product identifiers

Product name: IMCSzyme®  
 Other name(s): β-glucuronidase  
 Product number: 04-E1F  
 CAS No.: 9001-45-0  
 EC No.: 3.2.1.31

### 1.2 Intended uses

Identified uses: Laboratory chemicals and liquid chromatography.

### 1.3 Supplier information

Company: Integrated Micro-Chromatography Systems, Inc. (IMCS)  
 110 Centrum Drive  
 Irmo, SC 29063  
 Telephone: +1 (888) 560-2073  
 Website: www.imcstips.com

### 1.4 Emergency telephone number

Emergency Phone: VelocityEHS USA and Canada: +1 (800) 255-3924  
 VelocityEHS International: +1 (813) 248-0585  
 IMCS Technical Support: +1 (888) 560-2073

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

This product is not classified as a hazardous material.

### 2.2 Label Elements

No labeling applicable.

### 2.3 Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

### 2.4 Unknown acute toxicity

No data available.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Mixture Other name(s): β-glucuronidase CAS No.: 9001-45-0 EC No.: 3.2.1.31

CAS No.	Chemical Name	Component Hazard Classifications	%
9001-45-0	β-glucuronidase	H317, H334	0.01-8%
57-50-1	Sucrose	-	0.5-15%
7732-18-5	Water	-	85-99%

See section 16 for full text of hazardous statements.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

General information: Avoid skin and eye contact with product. Consult physician if symptoms occur.  
After inhalation: Supply fresh air; consult physician if symptoms occur.  
After skin contact: Remove contaminated clothing. Wash skin with soap and plenty of water.  
After eye contact: Remove contact lenses and rinse opened eye for at least 15 minutes with running water.  
After swallowing: Rinse mouth with water; consult physician if symptoms occur.

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

Prolonged exposure may cause irritation of respiratory system, skin, and/or eyes.

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

If exposed or concerned, seek medical advice and attention. Treat symptomatically.

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## 5. FIREFIGHTING MEASURES

### 5.1 Suitable extinguishing media

CO<sub>2</sub>, dry chemical, foam, or water spray.

### 5.2 Unsuitable extinguishing media

No data available.

### 5.3 Specialized hazards arising from the substance or mixture:

No data available.

### 5.4 Specialized protective equipment or precautions:

No special measures required. Exercise caution when fighting any chemical fire.

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## 6. ACCIDENTAL RELEASE MEASURES

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

Wear protective clothing. Avoid contact with eyes, skin, and clothing. Avoid breathing vapors, mists, or sprays.

### 6.2 Environmental precautions

No special measures required.

### 6.3 Methods and materials for containment and clean up

Absorb with inert liquid-binding materials (sand, vermiculite, universal binders, sawdust).

### 6.4 Reference to other sections

See section 7 for safe handling, section 8 for personal protection equipment, and section 13 for disposal information.

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## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Wash hands and other exposed areas with soap and water after handling. Handle in accordance with good laboratory practices and safety procedures.

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

Store tightly closed and upright in a cool, dry place. Store away from direct sunlight. Recommended storage temperature is 2-8 °C.

Incompatible materials: None known.

### 7.3 Specific end use(s)

For research use only.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Components with workplace control parameters:

Sucrose (57-50-1)			
PEL	15*, 5** mg/m <sup>3</sup>	*Total dust	**Respirable fraction
REL	10*, 5** mg/m <sup>3</sup>	*Total dust	**Respirable fraction
TLV	10 mg/m <sup>3</sup>		

### 8.2 Engineering controls

Wear personal protective equipment. Ensure safety shower and eyewash station are near work area. Ensure adequate ventilation.

### 8.3 Protective equipment and hygiene

Breathing equipment: Not required.  
 Skin protection: Chemical-resistant gloves, protective clothing.  
 Eye protection: Safety glasses or goggles.  
 Hygiene: Wash hands and exposed skin thoroughly with soap and water after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Appearance:	Colorless
Odor:	Odorless
Odor threshold:	No data available
pH:	No data available
Melting point/range:	No data available
Freezing point/range:	No data available
Boiling point/range:	No data available
Flash point:	No data available
Evaporation rate:	No data available
Flammability (solid, gas):	Not applicable
Upper flammability or explosive limits:	No data available
Lower flammability or explosive limits:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Relative density:	No data available
Solubility:	Miscible with water
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	Product is not self-igniting
Decomposition temperature:	No data available
Viscosity:	No data available

**10. STABILITY AND REACTIVITY**

- 10.1 Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2 Chemical stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3 Possibility of hazardous reactions:** None expected under normal use.
- 10.4 Conditions to avoid:** Direct sunlight, extreme temperatures.
- 10.5 Incompatible materials:** None known.
- 10.6 Hazardous decomposition products:** None known.

**11. TOXICOLOGICAL INFORMATION**

**11.1 Acute toxicity**

Not classified.

Component Toxicity Information	
<b>Sucrose (57-50-1)</b>	
LD50 Oral (Rat)	29,700 mg/kg

**11.2 Primary irritant effect**

On the skin: Prolonged exposure may cause irritation.  
 On the eye: May cause irritation to eyes.  
 Sensitization: May cause skin and respiratory sensitization.

**11.3 Additional toxicological information**

Prolonged or repeated exposure may cause irritation of respiratory system, skin, and/or eyes.

**11.4 Carcinogenicity**

Not applicable.

**12. ECOLOGICAL INFORMATION**

**12.1 Ecotoxicity**

Aquatic toxicity: Not classified.  
 Persistence and degradability: Not established.  
 Bio accumulative potential: Not established.  
 Mobility in soil: No data available.

**12.2 Additional ecological information**

General notes: Generally, not hazardous for water.  
 Other adverse effects: No further relevant information available.

**13. DISPOSAL CONSIDERATIONS**

Recommendation: Soak/sweep up and discard. Dispose of in accordance with local, state, and federal regulations.  
**Uncleaned packaging:** Container may remain hazardous when empty. Continue to observe all precautions.

**14. TRANSPORT INFORMATION**

Not regulated for transport.

**15. REGULATORY INFORMATION**

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

SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)  
 Section 302/304 (40CFR355.30/40CFR355.40): No ingredients listed.  
 Section 313 (40CFR372.65): No ingredients listed.  
 TSCA Active Listing: 57-50-1 sucrose; 7732-18-5 water

**15.2 State regulations**

<b>Sucrose (57-50-1)</b>
Massachusetts – Right to Know List
Pennsylvania – RTK (Right to Know) List
Rhode Island – Right to Know List

**16. OTHER INFORMATION**

The information in this document is based on the present state of knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. IMCS, Inc and its affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

**Date of Last Revision:** 09/15/2022

**GHS (Globally Harmonized System) full text:**

H317 – Cat. 1	May cause an allergic skin reaction; sensitization, skin
H334 – Cat. 1	May cause allergy or asthma symptoms or breathing difficulties if inhaled; sensitization, respiratory

**Abbreviations and Acronyms**

CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 EC: Enzyme Commission  
 TSCA: Toxic Substance Control Act