



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product name Glucose Oxidase HPS200
Synonym(s) Glucose Oxidase HPS200 Ex. Aspergillus niger
CAS # Mixture
Product Number: GLOX-70-6455
Product description Lyophilized powder containing enzyme (protein) and buffering salt.
Product use Enzyme reagent for laboratory use.

Corporate Headquarters

Genzyme Corporation
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Cambridge, MA 02142 USA
www.genzyme.com
Phone: 617-252-7500

Manufacturer/Distributor

Genzyme Diagnostics
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Kent ME19 4AF UK
www.genzymediagnosics.com
Phone: 44 (0) 1732 220022

Emergency Telephone Numbers

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CHEMTREC (U.S.): 800-424-9300
CHEMTREC (Outside U.S.): +1 703-527-3887

Distributor

Genzyme Diagnostics
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Framingham, MA 01701 USA
www.genzymediagnosics.com
Phone: 800-332-1042

2. Hazards Identification

Regulatory status This preparation is not classified as hazardous under U.S. OSHA 29 CFR 1910.1200.

Precautionary statements CAUTION! The chemical, physical and toxicological properties of this preparation have not been thoroughly characterized. Avoid contact with eyes and skin. Do not ingest or inhale. Preparation appearance: yellow powder.

Potential health effects

Inhalation No data available. Although there is no evidence that the enzyme(s) in this preparation induces specific respiratory hypersensitivity, all proteins are potential respiratory allergens and may result in respiratory sensitization in certain individuals after repeated and/or prolonged inhalation exposure, producing mild to severe symptoms similar to pollen allergy or asthma, including mucous membrane or eye irritation, itching of the skin or eyes, sneezing, nasal or sinus congestion, coughing, and tightness in the chest. These symptoms may develop as late as 12 hours after exposure.

Eyes No data available. Eye exposure may cause irritation, redness and itching.

Skin No data available. Skin contact may cause irritation, dryness and redness.

Ingestion No data available.

Chronic effects No data available. Repeated inhalation may result in respiratory sensitization.

Target organs Unknown.

Potential environmental effects No data available.

3. Composition / Information on Ingredients

Non-hazardous components	CAS #	Percent
Glucose oxidase	9001-37-0	88 - 92
Sodium phosphate monobasic dihydrate	13472-35-0	8 - 12

4. First Aid Measures

First aid procedures

Inhalation If inhaled, move from exposure area to fresh air. Seek medical attention if breathing becomes difficult or if cough or other symptoms develop.

Eye contact	Immediately flush eyes with plenty of tepid water for 15 minutes while separating eyelids with fingers. Remove contact lenses if worn. Obtain medical attention if needed or if symptoms, such as redness or irritation persist.
Skin contact	In case of contact, flush skin with cool water and remove contaminated clothing. Obtain medical attention if needed or if irritation or other symptoms develop.
Ingestion	In case of ingestion, contact a poison control center or physician for instructions.

5. Fire Fighting Measures

Extinguishing media

Suitable extinguishing media	Use extinguishing media suitable for surrounding fire, such as carbon dioxide, chemical foam, dry chemical or water spray.
Unsuitable extinguishing media	Unknown.

Specific hazards Material may burn when exposed to sufficient heat.

Hazardous combustion products Toxic gases may be generated by combustion, including carbon monoxide (CO), carbon dioxide (CO₂) and phosphorus oxides (PO_x).

Protection of firefighters

Protective equipment and precautions for firefighters Firefighters should wear NIOSH-approved or equivalent Self-Contained Breathing Apparatus and full protective gear.

6. Accidental Release Measures

Personal precautions Avoid physical contact with material and avoid generating or inhaling dust. Ensure adequate ventilation. Wear Personal Protective Equipment (PPE) as indicated in Section 8. Wash hands thoroughly after handling.

Environmental precautions No information available.

Methods for cleaning up Do not dry sweep powder. Use HEPA-filtered vacuum, if available, otherwise wet mop to clean up a powder spill. Decontaminate the spill site following standard procedures. Dispose of materials in accordance with all applicable federal, state, local and provincial environmental regulations, per Section 13.

7. Handling and Storage

Handling Follow good laboratory hygiene practices. See Section 8, Engineering Controls. Minimize contact and contamination of personal clothing and skin. Wash hands thoroughly after handling.

Storage Store desiccated at -20°C (-4°F). Do not store with incompatible substances; see Section 10.

8. Exposure Controls / Personal Protection

Exposure guidelines There are no ACGIH, NIOSH, or OSHA occupational exposure limits currently established for components present in this preparation at concentrations equal to or greater than 1% (0.1% if carcinogen).

Engineering controls Use in well ventilated areas. If handling large quantities or there is a potential for dust or aerosol generation, use local exhaust ventilation. Facilities storing or using this material should be equipped with an eyewash fountain and a safety shower.

Personal protective equipment

Respiratory protection	A respirator is not required under normal conditions of use.
Eye / face protection	Wear appropriate protective chemical safety glasses.
Skin protection	Wear lab coat or other protective garments. Remove contaminated clothing promptly.
Hand protection	Wear chemical resistant protective gloves.
General	Follow company-specific safety procedures.

9. Physical & Chemical Properties

Physical state	Solid.
Appearance	Yellow powder
Odor	Not available
pH	6 - 7 (in aqueous solution)
Melting point	Not available
Freezing point	Not applicable
Boiling point	Not applicable
Flash point	Not applicable

Evaporation rate	Not applicable
Flammability	Not available.
Flammability limits in air, upper, % by volume	Not available
Flammability limits in air, lower, % by volume	Not applicable
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	Not available
Relative density	Not available
Solubility (water)	Water-soluble
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available

10. Chemical Stability & Reactivity Information

Reactivity	Unknown.
Chemical stability	Stable under ordinary conditions of use and storage. See Section 7.
Possibility of hazardous reactions	Hazardous polymerization will not occur.
Conditions to avoid	Unknown.
Incompatible materials	Unknown.
Hazardous decomposition products	Thermal decomposition may lead to release of irritating gases and vapors.

11. Toxicological Information

Routes of exposure	Occupational exposure routes may include eye contact, skin contact and inhalation.
Acute effects	No data available.
Local effects	No data available.
Chronic effects	No data available.
Carcinogenicity	No data available.
Mutagenicity	No data available.
Teratogenicity	No data available.
Sensitization	No data available.

12. Ecological Information

Ecotoxicity	No data available.
Mobility in environmental media	No data available.
Persistence / degradability	No data available.
Bioaccumulation	No data available.

13. Disposal Considerations

Disposal instructions	Dispose of unused product, spilled material and waste in accordance with all applicable federal, state, local and provincial environmental and hazardous waste regulations.
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14. Transport Information

DOT

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations

US TSCA Inventory: Registration Status

Glucose oxidase (9001-37-0) Listed.

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

16. Other Information

Further information

This MSDS has been prepared in accordance with the ANSI Z400.1 format and complies with the U.S. OSHA Hazard Communication Standard 29 CFR 1910.1200.

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