MATERIAL SAFETY DATA SHEET

PNPG7-Blocked

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: PNPG7-Blocked

Product Number: 70-3685-01; BLNM-70-3685

Synonym(s): p-Nitrophenyl-a-D-Maltoheptaoside (BLPNPG7)

Product Use: For in vitro reagent use.

Description: Chromogenic substrate for alpha-amylase enzyme.

Corporate Headquarters

Genzyme Corporation
500 Kendall Street
Cambridge, MA 02142
USA
Phone: 617-252-7500

Distributor

Genzyme Diagnostics
50 Gibson Drive
Kings Hill, West Malling
Kent, ME19 4AF
UK
Phone: 44 (0) 1732 220022

Distributor

Genzyme Diagnostics
31 New York Avenue
Framingham, MA 01701-9322
USA
Phone: 800-332-1042

Emergency Telephone Numbers

Genzyme (U.S.): 617-562-4555
CHEMTREC (U.S.): 800-424-9300
CHEMTREC (Outside U.S.): 703-527-3887

2. HAZARDS IDENTIFICATION

Precautionary Statements:

WARNING! The chemical, physical and toxicological properties of this substance have not been thoroughly characterized. Effects from exposure are expected to be similar to those known for phenolic compounds. May cause irritation to skin, eyes and respiratory tract. May be harmful if inhaled, absorbed or swallowed. Avoid contact with eyes and skin. Do not ingest or inhale. Substance appearance: off-white powder.

Routes of Exposure:

Occupational exposure routes may include eye contact, skin contact, skin absorption and inhalation.

Potential Health Effects:

Inhalation	Inhalation may cause respiratory tract irritation and may result in systemic effects.
Eye	Eye contact may cause irritation and burning.
Skin	Skin contact may cause irritation, tingling sensation and numbness. Absorption may result in systemic effects.
Ingestion	Ingestion may cause irritation of the mouth, throat and digestive system, nausea, vomiting, diarrhea and excess salivation. Ingestion may result in systemic effects.
Chronic Effects	Prolonged or repeated exposure may cause dermatitis, headache, shortness of breath, dizziness, and harmful or toxic target organ effects.
Target Organs	Possible: Central nervous system, cardiovascular system, liver and kidneys.

Regulatory Status:

This material is classified as hazardous under U.S. OSHA 29 CFR 1910.1200; E.C. Directive 67/548/EEC; Canadian R.S. 1985, c. H-3; U.K. CHIP 2002 No. 1689; and/or U.N. GHS ST/SG/AC 10/30. Refer to Sec. 15, Regulatory Information, for details regarding hazard classification.

This material is not listed as a carcinogen by IARC, NTP, OSHA or ACGIH.

Potential Environmental Effects:

No data available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS #	EC #	% (wt/wt)
Blocked p-nitrophenyl-alpha-D-maltoheptaoside	109055-07-4	Not Assigned	95 - 100
EC R-Phrases: None	**EC Hazard Class:** None		

4. FIRST AID MEASURES

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, immediately flush skin with copious amounts of 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 and seek immediate medical attention.

5. FIRE FIGHTING MEASURES

Flammable Properties:

Material may burn when exposed to sufficient heat.

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 Arising from the Chemical:

Irritating or highly toxic gases may be generated by combustion, including carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx).

Standard 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:

Wear Personal Protective Equipment (PPE) as indicated in Section 8. Avoid physical contact with material and avoid generating or inhaling dust. Ensure adequate ventilation. After handling, immediately wash any areas of the body that may have been exposed, whether or not known skin contact has occurred.

Environmental Precautions:

No information available.

Methods and Materials for Containment and Clean-Up:

Do not dry sweep powder. Use HEPA-filtered vacuum, if available, otherwise wet mop to clean up a powder spill. Very slippery when wet. 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. Minimize dust generation during use. See Section 8, Engineering Controls. Minimize contact and contamination of personal clothing and skin. Wash hands thoroughly after handling.

Storage:

Store at 2 - 8°C (35 - 46°F). Do not store with incompatible substances; see Section 10.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

There are no ACGIH, NIOSH, OSHA or country-specific occupational exposure limits currently established for this material.

Engineering Controls:

Use local exhaust ventilation. Facilities storing or using this material should be equipped with an eyewash fountain and a safety shower.

Personal Protective Equipment (PPE):

Respiratory	A respiratory protection program that meets U.S. Federal OSHA 29 CFR 1910.134 and ANSI Z99.2, European Standard CR 529, or other applicable regulatory standards should be followed whenever exposure limits may be exceeded (if applicable) and engineering controls are not feasible, or if insufficient ventilation or workplace conditions warrant the use of respiratory protection. In such cases an air purifying respirator equipped with particulate filter cartridges, (42 CFR 84 - NIOSH Part 84 particulate filter, EN 141/143 particulate "P" filter), and organic vapor canisters, selected to provide a filtration efficiency appropriate to your workplace is recommended.
Eye/Face	Wear appropriate protective chemical safety glasses or goggles.
Skin	Wear appropriate protective clothing, such as a lab coat or other long-sleeved garment over clothing to minimize contact and contamination of clothing. Remove contaminated clothing promptly.
Gloves	Wear chemical resistant protective gloves. Change gloves regularly or immediately if they are contaminated, torn or punctured.
General	Follow company-specific safety procedures.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Off-white powder	**pH:**	Not available
Molecular Weight:	1362 g/moL	**Solubility:**	Water-soluble
Odor:	Not available	**Evaporation Rate:**	Not applicable
Specific Gravity:	Not available	**Vapor Pressure:**	Not available
Boiling Point:	Not applicable	**Partition Coefficient (n-octanol/water):**	Not available
Melting Point:	Not available		
Freezing Point:	Not applicable	**Vapor Density:**	Not applicable

Chemical Family: Glycoside phenol derivative

Chemical Name: 4,6-Benzylidene-p-nitrophenyl-alpha-D-maltoheptaoside

Molecular Formula: Not available

Flammability/Explosivity Limits in Air, Lower: Not applicable

Flammability/Explosivity Limits in Air, Upper: Not applicable

Auto-Ignition Temperature: Not available

Flash Point: Not applicable

10. STABILITY AND REACTIVITY

Chemical Stability:

Unknown.

Conditions to Avoid:

Avoid heat, flames, sparks and ignition sources. Avoid prolonged exposure to direct sunlight. Excessive heat may damage the product.

Incompatible Materials:

Avoid strong oxidizing agents, strong acids and bases.

Hazardous Decomposition Products:

Thermal decomposition may lead to release of irritating gases and vapors.

Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Effects:

May be harmful by inhalation, ingestion, eye and skin contact.

Local Effects:

May be irritating to the eyes, skin and respiratory system.

Chronic Effects:

Chronic effects from repeated or long-term exposure to this material may be similar to those known for phenolic compounds, which may include headache, vertigo, cough, fatigue, muscle aches and pains, lack of appetite, vomiting, partial paralysis, bronchitis, weakness, dermatitis, leukoderma, and target organ effects.

Carcinogenicity:

No data available.

Mutagenicity:

No data available.

Teratogenicity:

No data available.

Reproductive Effects:

No data available.

Sensitization:

No data available.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

No data available.

Persistance and Degradability:

No data available.

Bioaccumulative Potential:

No data available.

Mobility in Environmental Media:

No data available.

13. DISPOSAL CONSIDERATIONS

Methods of Disposal:

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

14. TRANSPORT INFORMATION

Basic Shipping Description:

Not classified as dangerous goods. Not regulated per IATA and DOT regulations.

15. REGULATORY INFORMATION

US Federal Regulations:

This product is not present on any U.S. federal hazardous chemical regulatory list.

International Regulations:

This product is not present on any international hazardous chemical regulatory list.

Canadian Hazardous Products:

WHMIS Status Non-controlled

European Communities Dangerous Substances/Preparations:

EC Hazard Class None

Risk Phrases None

Safety Phrases None

16. OTHER INFORMATION

Further Information:

This MSDS has been prepared in accordance with the ANSI Z400.1 format. Every effort has been made to adhere to the hazard criteria and content requirements of the U.S. OSHA Hazard Communication Standard, Canadian Controlled Products Regulation (CPR), UK Chemical Hazard Information and Packaging Regulations, European Communities REACH Regulation, and UN Globally Harmonized System of Classification and Labelling of Chemicals.

MSDS Origination Date: December 15, 2004

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