

BETA-GLUCOSIDASE - SAFETY DATA SHEET

Formulation and classification require confirmation

Prepared in the 16-section SDS format for Great Britain. This document uses the published product information and the supplied cellulase SDS as a layout and handling reference; it is not an approved product classification.

SECTION 1**Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Item	Information
Product name	beta-Glucosidase
Product type	Enzyme preparation supplied by volume; liquid form assumed, to be confirmed.
Declared activity	>10,000 U/g (product page). Activity is not enzyme-protein concentration.

1.2 Relevant identified uses and uses advised against

Biocatalyst for cellobiose and suitable beta-glucoside hydrolysis. Applications include food processing, agriculture, paper and pulp, biofuels and advanced materials. Food-grade status is stated on the product page; it does not remove occupational exposure hazards. Avoid spray or aerosol-generating use without suitable exposure controls. Medical or therapeutic use is not established.

1.3 Details of the supplier of the safety data sheet

Scientific and Technical Limited
John Eccles House, The Oxford Science Park, Oxford OX4 4GP, United Kingdom
Telephone: +44 1223 626543
Email: sales@scientificandtechnical.com
Website: www.scientificandtechnical.com

1.4 Emergency telephone number

Supplier: +44 1223 626543 (normal UK business hours; details retained from the supplied template). For a life-threatening emergency in the UK call 999. For urgent medical advice call NHS 111.

SECTION 2**Hazards identification****2.1 Classification of the substance or mixture**

The finished-product GB CLP classification cannot be established from the product page. Obtain the manufacturer SDS and complete composition before issue. Treat airborne enzyme protein as a potential respiratory sensitiser during handling. The cellulase template's H319 and H334 classifications have not been transferred as confirmed classifications.

2.2 Label elements

Signal word, pictograms, hazard statements and mandatory precautionary statements: pending supplier classification. Section 8 gives interim exposure controls; these do not constitute an approved label.

2.3 Other hazards

Mist, aerosols or dried enzyme residues may present inhalation risks. PBT, vPvB and endocrine-disrupting assessments are unavailable for this formulation.

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SECTION 3**Composition/information on ingredients****3.2 Mixtures**

Component	Concentration	Identification / classification
beta-Glucosidase	Not disclosed	Enzyme identity stated on product page. CAS/EC identifiers and component classification require manufacturer confirmation.
Carrier, stabilisers, preservatives and other constituents	Not disclosed	Full formulation and any additional enzyme activities require confirmation.

The published activity (>10,000 U/g) does not establish protein percentage, purity or the concentration of hazardous ingredients. The cellulase template's 16-18% protein content is not applicable without beta-glucosidase formulation data.

SECTION 4**First-aid measures****4.1 Description of first-aid measures**

General: Remove contaminated clothing. Seek medical advice if symptoms persist or if there is concern. Show the product label and this document to the clinician.

Inhalation: Move the person to fresh air and keep comfortable for breathing. Seek immediate medical attention for breathing difficulty or asthma-like symptoms.

Skin contact: Wash thoroughly with soap and water. Wash contaminated clothing before reuse. Obtain medical advice if irritation develops.

Eye contact: Rinse cautiously with clean water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation persists.

Ingestion: Rinse mouth. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical advice if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

Exposure to airborne enzymes may cause allergic or asthma-like symptoms in sensitised individuals. Eye or skin irritation may occur; finished-product data have not been supplied.

4.3 Indication of immediate medical attention and special treatment

Treat symptomatically. Consider occupational enzyme sensitisation where respiratory symptoms occur.

SECTION 5**Firefighting measures**

5.1 Extinguishing media: Use water spray, alcohol-resistant foam, dry powder or carbon dioxide as appropriate for the surrounding fire.

5.2 Special hazards: Flammability and thermal decomposition data for the formulation are unavailable. Avoid breathing smoke, decomposition products or enzyme-containing aerosols.

5.3 Advice for firefighters: Wear self-contained breathing apparatus and suitable protective clothing. Contain contaminated firefighting water.

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SECTION 6**Accidental release measures**

6.1 Personal precautions: Ensure adequate ventilation. Keep unprotected persons away. Avoid contact and inhalation of mist, aerosol or dried residues. Use the protective equipment in Section 8.

6.2 Environmental precautions: Prevent uncontrolled release to drains, surface water and soil. Notify the relevant authority if a significant release cannot be contained.

6.3 Containment and cleaning: For a liquid spill, contain with inert absorbent and collect in a closed, labelled container. Avoid splashing, high-pressure cleaning and dry sweeping. Clean the affected surface after recovery, subject to local discharge controls.

6.4 Reference to other sections: See Sections 8 and 13.

SECTION 7**Handling and storage**

7.1 Precautions for safe handling: Avoid direct contact and inhalation. Avoid spray, splashes and aerosol formation. Use suitable ventilation. Do not eat, drink or smoke while handling. Wash hands after use.

7.2 Conditions for safe storage: Keep in the original, tightly closed container, protected from heat, sunlight and contamination. The product page states a 12-month storage period but refers to a PDF for conditions; storage temperature and shelf-life basis require confirmation. Do not assume the cellulase template's 5-25°C range applies.

7.3 Specific end uses: Biocatalysis in the applications described in Section 1. No product-specific exposure scenario was supplied.

SECTION 8**Exposure controls/personal protection****8.1 Control parameters**

No product-specific occupational exposure limits were provided. Assess airborne enzyme exposure under COSHH and minimise exposure using suitable controls.

8.2 Exposure controls

Control	Recommended measure
Engineering controls	Use closed handling or effective local exhaust where mist, aerosol or dust may arise. Avoid aerosol-generating operations.
Respiratory protection	Where engineering controls are insufficient, select suitable particulate respiratory protection through the task risk assessment. A P3 filter may be appropriate for enzyme aerosols; fit testing is required for tight-fitting RPE.
Eye/face protection	Wear tightly fitting safety goggles; add a face shield where splashing is possible.
Hand protection	Wear suitable protective gloves. Confirm compatibility and breakthrough time against the full formulation.
Body protection / hygiene	Use protective work clothing. Remove contaminated clothing and wash before reuse. Wash hands before breaks.
Environmental controls	Prevent uncontrolled release and route wastewater to appropriate treatment.

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SECTION 9**Physical and chemical properties****9.1 Information on basic physical and chemical properties**

Property	Value / information
Physical state	Liquid assumed from volume-based supply; confirm with manufacturer.
Colour; odour	Not specified.
Melting / freezing point	No product-specific data available.
Boiling point / range	No product-specific data available.
Flammability	Not established.
Lower / upper explosion limits	No product-specific data available.
Flash point	Not supplied; cellulase template value not transferred.
Auto-ignition / decomposition temperature	No product-specific data available.
pH of product as supplied	Not specified; enzyme operating pH is not formulation pH.
Kinematic viscosity	No product-specific data available.
Solubility	No finished-formulation data supplied.
Partition coefficient n-octanol/water	No product-specific data available.
Vapour pressure	No product-specific data available.
Density / relative density	Not supplied; cellulase template value not transferred.
Relative vapour density	No product-specific data available.
Particle characteristics	Not applicable if supplied as a liquid; confirm physical form.

9.2 Other information

Published enzyme operating range: 15-60°C and pH 3.5-8.0; optimum: 37-55°C and pH 3.5-5.5. These describe catalytic performance, not safe storage limits or measured physical properties.

SECTION 10**Stability and reactivity**

Subsection	Information
10.1 Reactivity	No formulation-specific reactivity data supplied.
10.2 Chemical stability	Supplier confirmation required for the recommended storage conditions.
10.3 Hazardous reactions	No formulation-specific data supplied.
10.4 Conditions to avoid	Avoid aerosol formation, extreme temperatures and contamination.
10.5 Incompatible materials	Not established; segregate from strong oxidising agents as a precaution.
10.6 Hazardous decomposition products	No specific data. Irritating products may be generated in a fire.

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SECTION 11

Toxicological information

11.1 Information on hazard classes

Hazard class	Available information
Acute toxicity	No finished-product data supplied; classification unresolved.
Skin corrosion / irritation	No finished-product data supplied. Avoid prolonged contact.
Serious eye damage / irritation	No finished-product data supplied. The cellulase H319 classification has not been adopted.
Respiratory / skin sensitisation	Airborne enzymes may cause respiratory sensitisation. Product classification and skin-sensitisation data require confirmation.
Germ cell mutagenicity	No finished-product or complete component data supplied.
Carcinogenicity	No finished-product or complete component data supplied.
Reproductive toxicity	No finished-product or complete component data supplied.
STOT - single / repeated exposure	No finished-product or complete component data supplied.
Aspiration hazard	No adequate formulation or viscosity data supplied.

Likely exposure routes include inhalation of mist/aerosol or dried residues, skin/eye contact and accidental ingestion. Possible symptoms include respiratory allergy and irritation. Lack of data must not be interpreted as absence of hazard.

11.2 Information on other hazards

Endocrine-disrupting properties and other toxicological effects have not been assessed for the complete formulation.

SECTION 12

Ecological information

Subsection	Information
12.1 Toxicity	No finished-product ecotoxicity data supplied.
12.2 Persistence and degradability	No finished-product test data supplied.
12.3 Bioaccumulative potential	No finished-product assessment supplied.
12.4 Mobility in soil	No product-specific data supplied; prevent release.
12.5 PBT / vPvB assessment	Cannot be established without full component information.
12.6 Endocrine-disrupting properties	No complete formulation assessment supplied.
12.7 Other adverse effects	No data supplied. Avoid uncontrolled environmental release.

SECTION 13

Disposal considerations

13.1 Waste treatment methods: Dispose of residues and contaminated packaging through an authorised waste contractor under applicable requirements. Do not discharge uncontrolled product to drains. Assign the waste code according to actual composition and use. Empty containers before approved recycling or disposal.

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SECTION 14**Transport information**

Transport classification is pending confirmation from the manufacturer. The cellulase template's non-dangerous-goods status is not evidence of the status of this preparation.

Item	ADR/RID, IMDG and ICAO-TI/IATA-DGR
14.1 UN number or ID number	Not established.
14.2 UN proper shipping name	Not established.
14.3 Transport hazard class(es)	Not established.
14.4 Packing group	Not established.
14.5 Environmental hazards	Not established.
14.6 Special precautions for user	Keep containers closed, upright and protected from damage. Confirm carrier requirements before shipment.
14.7 Maritime transport in bulk	Not assessed; bulk maritime carriage requires separate review.

SECTION 15**Regulatory information**

15.1 Safety, health and environmental regulations: For Great Britain, review under UK REACH, GB CLP and COSHH as applicable. This document does not demonstrate regulatory compliance. Supply into other jurisdictions requires review of the relevant local requirements.

15.2 Chemical safety assessment: No chemical safety assessment was provided for this preparation.

SECTION 16**Other information**

Document basis: Version 1.0, prepared 17.09.2026. New beta-glucosidase document using the design and general handling structure of the supplied Cellulase SDS, version 2.3 dated 02.09.2026. Cellulase-specific composition, physical properties and classification have not been assumed to apply.

Hazard statements referenced for review only:

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H319 - Causes serious eye irritation.

These statements are not a confirmed classification of this product.

Required to finalise: Manufacturer SDS; full composition and concentrations; validated identifiers and hazard classifications; physical form, formulation pH, density and other relevant properties; storage conditions; transport assessment; supplier approval.

Training: Personnel should understand enzyme exposure prevention, appropriate PPE, spill response and the risk of respiratory sensitisation.

Abbreviations: CLP: Classification, Labelling and Packaging; COSHH: Control of Substances Hazardous to Health; PBT: persistent, bioaccumulative and toxic; vPvB: very persistent and very bioaccumulative; STOT: specific target organ toxicity; RPE: respiratory protective equipment.

Sources accessed 17.09.2026:

Scientific and Technical: [beta-Glucosidase product page](#)

HSE: [Safety Data Sheets](#)

User-supplied cellulase-enzyme-safety-data-sheet.pdf (layout and general handling reference).

Formulation and safety classification require confirmation before supply.