

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

1.1 Product identifiers

Product name:	Alizarin N-acetyl-β-D-glucosaminide			
Product code:	89007			
CAS Number:	None			
REACH Number:	A registration number is not available for this substance as the annual tonnage does not			
	require registration.			
1.2 Relevant identified uses of the substance or mixture and uses advised against				
Identified uses:	For detection of enzyme activity in laboratories.			
Uses advised against:	None identified.			
1.3 Details of the supplier of the safety data sheet				
Company:	Glycosynth Ltd			
	14 Craven Court, Winwick Quay, Warrington, Cheshire WA2 8QU, UK			
Telephone:	01925 575075			
Email:	info@glycosynth.co.uk			
1.4 Emergency telephone number				
Emergency Phone Number:	+44 1925 575 075			
Hours of operation:	8.30 – 17.00 (Local business hours weekdays)			

2. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

Not a hazardous substance according to Regulation (EC) No. 1272/2008.

2.2 Label elements

Not a hazardous substance according to Regulation (EC) No. 1272/2008.

2.3 Other Hazards

None identified. This substance contains no components considered (identified) to be: persistent, bioaccumulative and toxic (PBT); very persistent and very bioaccumulative (vPvB); or having endocrine disrupting properties at levels of 0.1% or higher.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Ingredient name:	Alizarin β-D-glucosaminide
Formula:	C ₂₂ H ₂₁ NO ₉
Molecular Weight:	443.40
Synonyms:	Alizarin- β -D- N-acetyl- β -D-glucosaminide, Alizarin 2-acetamido-2-deoxy- β -D-glucopyranoside

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eyes: Flush eyes with water as a precaution. Skin: Wash with water, then soap and water.

Ingestion: Rinse mouth with water.

Inhalation: Remove to fresh air.

If problems occur, seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Use dry powder, carbon dioxide, foam, or water extinguishers.

5.2 Special hazards arising from the substance or mixture

Carbon oxides.

5.3 Advice for firefighters

No special measures required.

5.4 Further information

No data available.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment, and emergency procedures

Avoid breathing dust. Avoid contact with eyes and skin. Wear suitable personal protective equipment if necessary.

6.2 Environmental precautions

No special precautions. Avoid discharge into drains and waterways whenever possible.

6.3 Methods and materials for containment and clean up

Transfer to a suitable container for disposal.

6.4 Reference to other sections

See section 8 of this SDS for personal protective equipment and section 13 of this SDS for disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Ensure there is sufficient exhaust ventilation at places where dust is formed. Avoid contact with eyes and skin.

7.2 Conditions for safe storage, including any incompatibilities

To prevent deterioration, the product should be stored in tightly closed containers in a freezer or cold room at -20 degrees centigrade. The product may deteriorate slightly if exposed to light and humidity for prolonged periods.

7.3 Specific end uses

For detection of enzyme activity in laboratories

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure control

General industrial hygiene practice. Engineering measure: Ensure there is sufficient ventilation of the area.

Personal protective equipment:

Eye/face protection: Safety glasses.

Hand protection: To prevent skin exposure use gloves to a minimum standard of ISO 374-1/Type C.

Body protection: Appropriate protective clothing to prevent skin contact.

Respiratory protection: Not required. For nuisance levels of dust, use type FFP2 or N95 Standard dust masks. Other personal protection advice: none available.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

(b) Colour:Yellow.(c) Odour:No data available.(d) Melting point:No data available.	(a) Physical state:	Solid.
(d) Melting point: No data available.	(b) Colour:	Yellow.
	(c) Odour:	No data available.
	(d) Melting point:	No data available.
(e) Initial boiling point and boiling range: No data available.	(e) Initial boiling point and boiling range:	No data available.
(f) Flammability: No data available.	(f) Flammability:	No data available.
(k) pH: No data available.	(k) pH:	No data available.
(m) Solubility: Soluble in dimethyl sulfoxide at a concentration of 1%.	(m) Solubility:	Soluble in dimethyl sulfoxide at a concentration of 1%.

9.2 Other safety information No other identified hazard or safety characteristics.		
10.1 Reactivity		
No dangerous reactions known under conditions of normal use.		
10.2 Chemical stability		
Stable under normal conditions.		
10.3 Possibility of hazardous reactions		
No hazardous reactions known under conditions of normal use.		
10.4 Conditions to avoid		
No data available.		
10.5 Incompatible materials		
Very strong oxidising agents. Avoid contact as exothermic decomposition may occur.		
10.6 Hazardous decomposition products		
None.		
11. TOXICOLOGICAL INFORMATION		
11.1 Information on toxicological effects		

No data available.

No data available.

No data available (does not contain nanoforms).

Acute toxicity:	Not classified based on available information.
Skin corrosion/irritation:	Not classified based on available information.
Serious eye damage/irritation:	Not classified based on available information.
Respiratory or skin sensitisation:	Not classified based on available information.
Germ cell mutagenicity:	Not classified based on available information.
Carcinogenicity: IARC:	No component of this product present at levels >0.1% is identified as a probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity:	Not classified based on available information.
Specific target organ – single exposure:	Not classified based on available information.
Specific target organ – repeated exposure:	Not classified based on available information.
Aspiration hazard:	Not classified based on available information.
Signs and symptoms of exposure:	To the best of our knowledge, the chemical, physical and toxicological
	properties have not been thoroughly investigated.
11.2 Information on other hazards	None identified(or no data available)

12. ECOLOGICAL INFORMATION

12.1 Toxicity
No data available.
12.2 Persistence and degradability
No data available.
12.3 Bioaccumulative potential
No data available.
12.4 Mobility in soil
No data available.
12.5 Results of PBT and vPvB assessment

(n) Partition coefficient: n-octanol/water:

(p) Density:

(r) Particle characteristics:

This substance 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.

12.6 Endocrine disrupting properties

No data available. The substance is not for plant protection use. The substance is not a known, presumed or suspected endocrine disrupter.

12.7 Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

The substance is not classified as hazardous waste according to Directive 2008/98/EC. Dispose according to local regulations. Contaminated packaging: Dispose of as unused product. Empty containers may be recycled.

14. TRANSPORT INFORMATION

14.1 UN number

Not regulated as a dangerous good.

14.2 UN proper shipping name
Not regulated as a dangerous good.
14.3 Transportation hazard class(es)
Not regulated as a dangerous good.
14.4 Packaging group
Not regulated as a dangerous good.
14.5 Environmental hazard
Not regulated as a dangerous good.
14.6 Special precautions for user
Remarks: Not a dangerous good in the meaning of ADR, RID, ADN, IMDG-Code, ICAO/IATA-DGR.
14.7 Maritime transport in bulk according to IMO instruments
Not applicable: not a bulk good.

15. REGULATORY INFORMATION

This safety data sheet complies with the requirements of Regulation (EU) No. 2020/878.
15.1 Safety, health, and environmental regulations/legislation specific for the substance No data available.
15.2 Chemical Safety Assessment No chemical safety assessment has been carried out.

16. OTHER INFORMATION

Revision number: 1, Revision date: 20.10.22. Reason: issued according to Regulation (EU) No. 2020/878.

Abbreviations: ADN – European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; IARC – International Agency for Cancer Research; IATA-DGR – International Air Transport Association Dangerous Goods Regulations; ICAO – International Civil Aviation Organization; IMO International Maritime Organization; IMDG – International Maritime Dangerous Goods.

The above information is believed to be correct to the best of our knowledge. The information given in this SDS should be used as a guide and does not constitute the user's own assessment of workplace risk as required by the Health and Safety legislation currently in force. We cannot accept liability for any loss, injury or damage which may result from handling or use of this product. All chemicals should be handled only by competent personnel within a suitably controlled environment.