

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY / UNDERTAKING

Product Name **2AB labelled Glycan**

Product Catalogue Name **CAB-A1-01, CAB-A1F-01, CAB-A2-01, CAB-A2F-01, CAB-A2G1-01, CAB-A3-01, CAB-ALPHA-GAL-01, CAB-C1-01, CAB-C1S(3)1-02, CAB-C1S(3,6)2-01, CAB-C2S(3,3)2-01, CAB-C2S(3,3)2-02, CAB-FA2B-01, CAB-FA2BG1-01, CAB-FA2G1-01, CAB-HYBRID-01, CAB-IGG-01, CAB-M3N2-01, CAB-MAN5-01, CAB-MAN6-01, CAB-MAN7-01, CAB-MAN8-01, CAB-MAN9-01, CAB-NA2-01, CAB-NA2F-01, CAB-NA3-01, CAB-NA4-01, CAB-NGA2-01, CAB-NGA2F-01, CAB-NGA3-01, CAB-NGA4-01 and CAB-GHP-30**

Company: Ludger Ltd
Culham Science Centre
Abingdon
Oxfordshire
OX14 3EB

Telephone: 01865 408554
Emergency Telephone: 01865 408554
Email: info@ludger.com

SECTION 2. HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [EU-GHS/CLP]**

Skin irritation (Category 2)

Eye irritation Category 2)

2.2 Label elements

Signal Word: Warning

Hazard Statement(s)

H315

Causes skin irritation

H319

Causes serious eye irritation

Precautionary Statement(s)**P264****Wash skin thoroughly after handling.****P280****Wear eye protection/ face protection.**

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do so. Continue rinsing.

P337 + P313**If eye irritation persists: Get medical advice/ attention.****2.3 Other hazard information:**

Supplemental Hazard Statements: None

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Formula: Please see CofA for the product or contact Ludger for more information.

Molecular Weight: Please see CofA for the product or contact Ludger for more information.

Component: each available in a separate vial	Concentration
Name: CAB-A1-01, CAB-A1F-01, CAB-A2-01, CAB-A2F-01, CAB-A2G1-01, CAB, A3-01, CAB-ALPHA-GAL-01, CAB-C1S(3)1-01, CAB-C1S(3)1-02, CAB-C1S(3,6)2-01, CAB-C2S(3,3)2-01, CAB-C2S(3,3)2-02, CAB-FA2B-01, CAB-FA2B-01, CAB-FA2BG1-01, CAB-FA2G1-01, CAB-HYBRID-01, CAB-M3N2-01, CAB-MAN5-01, CAB-MAN6-01, CAB-MAN7-01, CAB-MAN8-01, CAB-MAN9-01, CAB-NA2-01, CAB-NA2F-01, CAB-NA3-01, CAB-NA4-01, CAB-NGA2-01, CAB-NGA2F-01, CAB-NGA3-01, CAB-NGA4-01 and CAB-GHP-30	100 %of the CAB-glycan that is present, 100 pmol
EC-No. No data available	

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General Advice

Consult a physician if exposure causes ill effects and if in any doubt. Show this safety data sheet to the physician/ first responder in attendance.

If Ingested

Rinse mouth well with water. Never give anything by mouth to an unconscious person.

If skin is exposed

Wash the exposed area(s) well with plenty of soap and water.

If eyes are exposed

Flush the eye(s) with plenty of water or eye wash solution. If possible and present, remove contact lenses and continue rinsing.

If inhaled

Remove effected person(s) to a source of fresh air. If person is not breathing give artificial respiration.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

4.3 Indication of immediate medical attention and special treatment needed

No data available

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Water spray, dry chemical, carbon dioxide or foam, are appropriate media for extinguishing fire. Choose the most appropriate for the surrounding fire and materials.

5.2 Special hazards arising from the substance or mixture

No data available

5.3 Advice for firefighters

Fire fighters to wear self-contained breathing apparatus, if deemed necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing in any material, dust mask if appropriate. Wear laboratory gloves and protective clothing, such as a laboratory coat.

6.2 Environmental Precautions

Do not let product enter the drainage system.

6.3 Methods and material for containment and cleaning up

Collect the spillage with an absorbent material, such as paper towel, vermiculite, sand. Collect and store the spillage/waste material in an appropriately labelled container, arrange collection for disposal. Wash spillage area with water.

6.4 Reference to other sections

More information on disposal of the product is in Section 13.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin, inhalation of dust, mists and/or vapours associated with the material. Work with the material in a fume hood. Wear laboratory gloves, coat and glasses, in accordance with good laboratory practice and wash hands before and after handling the material.

7.2 Conditions for safe storage, including any incompatibilities

Store below -18°C. The material is to be stored in original packaging or similar tightly closing packaging.

7.3 Specific end uses

No data available

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with work place control parameters

This product contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

User to wear personal protective equipment e.g. Laboratory gloves, glasses and coats. Wash hands and avoid contact with skin.

Personal Protective Equipment

Eye / face protection

Use Safety glasses or goggles, which have been tested and approved under appropriate government standards, such as NIOSH (US) or EN 166 (EU).

Skin protection

Handle with gloves. Wearer should check for holes/tares before use. Proper glove removal technique should be used, to avoid potential contact with skin. Gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Wash and dry hands after handling the material.

Body Protection

Wear laboratory coat or similar coverings.

Respiratory protection

Respiratory protection is not required. It is recommended where possible to handle the product under extraction.

Thermal hazards

No data available

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Appearance	Opaque crystalline powder fluoresces under UV light.
Odour	None
Odour threshold	No data available
pH	No data available
Freezing/Melting Point	No data available
Initial boiling point and boiling range	No data available
Flash Point	No data available
Evaporation rate	No data available
Flammability	No data available
Upper/lower flammability or explosive limits	No data available
Vapour Pressure	No data available
Relative Density	No data available
Solubility in water	Soluble
Partition coefficient	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available

9.2 Other information

No data available

SECTION 10. STABILITY AND REACTIVITY**10.1 Reactivity**

No data available

10.2 Chemical stability

Stable when stored at recommended temperature. Store at -18°C.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to Avoid

Avoid exposure to sources of heat and humidity.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No data available

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

No data available

Skin corrosion/irritation

No data available

Serious eye damage/irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen.

Reproductive toxicity

No data available

STOT-single exposure

No data available

STOT-repeated exposure

No data available

Aspiration hazard.

No data available

Potential Health Hazards

Inhalation Possible allergic reaction to the material, reaction can be acute.

Ingestion Possible allergic reaction to the material, reaction can be acute.

Skin Possible allergic reaction to the material, reaction can be acute.

Eyes Possible allergic reaction to the material, reaction can be acute.

Signs and symptoms of exposure

Possible hypersensitivity to material.

SECTION 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

No data available

12.6. Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Any waste substances should be disposed of by a licensed professional disposal company.

Contaminated packaging

Dispose of as a used product/material.

SECTION 14. TRANSPORT INFORMATION**14.1 UN Number**

ADR/RID: -

IMDG: -

IATA: -

14.2 UN Proper Shipping Name

ADR/RID: Not Dangerous Goods

IMDG: Not Dangerous Goods

IATA: Not Dangerous Goods

14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

14.4 Packing group

ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental hazards

ADR/RID: No

IMDG Marine pollutant: No

IATA: No

14.6 Special precautions for user

No data available

SECTION 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

No data available

15.2 Chemical Safety Assessment

No data available

Please note that the label elements that used to go in Section 15 are now in Section 2.

SECTION 16. OTHER INFORMATION

The advice offered is derived from the current available information on the hazardous materials in this product and its component(s). Consideration has been made regarding the quantities offered in the pre-dispensed container. The advice offered is, therefore, not all-inclusive nor should it be taken as the descriptive of the compound generally.