



1 Identification of the substance/mixture and of the company/undertaking

· Product identifier

· Trade name: AdvanceBio Blood group H disaccharide

· Article number: GKAD-00144

Relevant identified uses of the substance or mixture and uses advised against

- · Application of the substance / the mixture Reagents and Standards for Analytical Chemical Laboratory Use
- Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Agilent Technologies Manufacturing GmbH & Co. KG Hewlett-Packard-Str. 8 76337 Waldbronn Germany

• Email: pdl-msds_author@agilent.com • Phone number: 0800 603 1000

· Emergency telephone number: CHEMTREC®: +(44)-870-8200418

2 Hazards identification

- · Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

The substance is not classified, according to the CLP regulation.

- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
- · Information concerning particular hazards for human and environment: Not applicable.
- · Label elements
- Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals.

The substance is not subject to classification according to EU lists and other sources of literature known to us.

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · **vPvB:** Not applicable.

3 Composition/information on ingredients

· Chemical characterisation: Substances

· CAS No. Description

Glycans

4 First aid measures

- Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.

(Contd. on page 2)

Trade name: AdvanceBio Blood group H disaccharide

(Contd. of page 1)

- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures
- Wear protective gloves / eye protection / face protection.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up: Pick up mechanically.
- · Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- Precautions for safe handling Wear protective gloves / eye protection / face protection.
- · Information about fire and explosion protection: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- Control parameters
- Ingredients with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists valid during the making were used as basis.

(Contd. on page 3)

Revision Date: 30.04.2019 Issue Date: 30.04.2019

Trade name: AdvanceBio Blood group H disaccharide

(Contd. of page 2)

- · Exposure controls
- Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

- · Respiratory protection: Not required.
- Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- · Penetration time of glove material
- The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection: Wear eye protection / face protection.

9 Physical and chemical properties			
· Information on basic physical and ch · General Information · Appearance: Form: Colour: · Odour: · Odour threshold:	Powder Beige Characteristic Not determined.		
· pH-value:	Not applicable.		
 Change in condition Melting point/freezing point: Initial boiling point and boiling range: 	Undetermined. Undetermined.		
· Flash point:	Not applicable.		
· Flammability (solid, gas):	Product is not flammable.		
· Decomposition temperature:	Not determined.		
· Auto-ignition temperature:	Not determined.		
· Explosive properties:	Product does not present an explosion hazard.		
Explosion limits: Lower: Upper:	Not determined. Not determined.		
· Vapour pressure:	Not applicable.		
Density:Relative densityVapour densityEvaporation rate	Not determined. Not determined. Not applicable. Not applicable.		
· Solubility in / Miscibility with water:	Soluble.		
Partition coefficient: n-octanol/water: Not determined.			

(Contd. on page 4)

Trade name: AdvanceBio Blood group H disaccharide

		(Contd. of page 3)
· Viscosity: Dynamic: Kinematic:	Not applicable. Not applicable.	
Solids content: Other information	100.0 % No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

(Contd. on page 5)

Revision Date: 30.04.2019 Issue Date: 30.04.2019

Trade name: AdvanceBio Blood group H disaccharide

Other adverse effects No further relevant information available.

(Contd. of page 4)

13 Disposal considerations

- · Waste treatment methods
- · Recommendation Dispose of contents/container in accordance with local/regional/national/international regulations.
- · Uncleaned packaging:

14 Transport information

- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

· UN-Number · ADR, ADN, IMDG, IATA	not regulated	
· UN proper shipping name · ADR, ADN, IMDG, IATA	not regulated	
· Transport hazard class(es)		
· ADR ADN IMDG IATA		

- ADR, ADN, IMDG, IATA · Class
- not regulated
- · Packing group
- · ADR, IMDG, IATA not regulated
- · Environmental hazards: Not applicable.
- · Special precautions for user Not applicable.
- · Transport in bulk according to Annex II of Marpol and
- the IBC Code Not applicable.
- · UN "Model Regulation": not regulated

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU
- Named dangerous substances ANNEX I Substance is not listed.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

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