

Revision Date: 29.04.2019

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

Product identifier

- · Trade name: AdvanceBio Blood group B trisaccharide
- · Article number: GKAD-00143
- · 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.

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- 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.

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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 chemical properties General Information · Appearance: Form: Powder Colour: Beige · Odour: Characteristic · Odour threshold: Not determined. · pH-value: Not applicable. [·] Change in condition Melting point/freezing point: Undetermined. Initial boiling point and boiling range: Undetermined. · Flash point: Not applicable. Product is not flammable. · Flammability (solid, gas): · Decomposition temperature: Not determined. · Auto-ignition temperature: Not determined. • Explosive properties: Product does not present an explosion hazard. · Explosion limits: Lower: Not determined. Not determined. Upper: · Vapour pressure: Not applicable. · Density: Not determined. · Relative density Not determined. · Vapour density Not applicable. · Evaporation rate Not applicable. Solubility in / Miscibility with water: Soluble. · Partition coefficient: n-octanol/water: Not determined. (Contd. on page 4)

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|---|---|-----------------|
| [·] 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.

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· Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods
- · Recommendation Dispose of contents/container in accordance with local/regional/national/international regulations.
- Uncleaned packaging:
- 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 | |
| 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 | f Marpol and |
| the IBC Code | Not applicable. |

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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