according to Regulation (EC) No. 1907/2006

Product number: S5049

b Product name: D(+)-Galactose from Lactose (min. 98.0% HPLC)

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1. Identification of the substance/preparation and of the company

Product identifier

Product Name: D(+)-Galactose from Lactose (min. 98.0% HPLC)

Catalogue-No.: S5049 59-23-4 CAS Number: EC Number: 200-416-4

REACH Registration Number: A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.

Application of the substance/the preparation

Laboratory chemical Biochemistry

Details of the supplier of the safety data sheet

Manufacturer /Supplier:

Genaxxon bioscience GmbH, Söflinger Str. 70, 89077 Ulm/Germany. Tel.: +49 (0)731 3608 123, info@genaxxon.com

Further information available from: General Management Emergency telephone number: +49 (0)731 3608 123 (Monday till Friday: 7:30 - 18:30 o'clock)

NOTE: If this product is a kit or supplied with more than one material, please refer to the MSDS for each component for hazard information.

Product Use:

This products are for laboratory research use only and are not intended for human or animal diagnostics, therapeutics or other clinical uses.

2. Hazardous identification

Classification of the substance/preparation/mixture Classification according to Regulation (EC) No1272/2008

The substance is not classified according to the CLP regulation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC: Not applicable

Label elements	
Labelling according to Regulation (EC) No. 1272/2008:	Void
Hazard pictograms:	Void
Signal word:	Void
Hazard statement(s):	Void
Other hazards	
Results of PBT and vPvB assessment	
PBT: Not applicable	
vPvB: Not applicable	

3. Composition/Information on ingredients

Chemical characterization: Substances CAS-Number Description 59-23-4 galactose Identification number(s) EINECS Number: 200-416-4

4. First Aid Measures

Description of first aid measures General information: No special measures required. After inhalation: Supply fresh air, consult a doctor in case of complaints. After skin contact:

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Wash off with plenty of water.

If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water.

Seek medical treatment.

After swallowing:

Rinse out mouth and then drink water (not more than 2 glasses).

If symptoms persist consult a 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. Fire-fighting Measures

Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions. Special hazards arising from the substance or mixture:

Combustible.

Ambient fire may liberate hazardous vapours. Advice for fire-fighters: None

Advice for fire-fighters

Protective equipment:

Wear self-contained respiratory protective device.

No special measures necessary. Additional information:

Dispose off fire debris and contaminated fire fighting water in accordance with official regulations.

6. Accidental release Measures

Personal precautions, protective equipment and emergency procedure:

Avoid formation of dust. Do not inhale dust. Ensure adequate ventilation. **Environmental precautions:** No special measures required. **Methods and materials for containment and cleaning up:** Pick up mechanically Avoid generation of dust. Clean up affected area Dispose off the material collected in accordance to regulations. **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:

Provide suction extractors if dust is formed. No special measures required if used according specifications. Information about fire – and explosion protection: Normal measures for preventive fire protection.

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: Keep container tightly sealed. Further information about storage conditions: Keep container tightly closed. Recommended storage temperature: 15°C to 25°C. Storage class: 10-13

Specific end use(s): No further relevant information available.

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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 list valid during the making were used as basis.

Exposure controls

Personal protective equipment: General protective and hygienic measures:

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

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with eyes and skin.

Change contaminated clothing.

Respiratory protection:



Not required

Protection of hands:



Protective gloves

The glove material has to be impermeable and resist ant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/the chemical mixture.

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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. For the permanent contact gloves made of the following materials are suitable:

Nitrile rubber, NBR

Recommended thickness of the material: ≥0.11 mm Value for permeation: Level: >480 min.

As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber, NBR

Recommended thickness of the material: ≥0.11 mm Value for the permeation: Level ≥480 min. **Eye/face protection:**



Safety glasses

Body protection:

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled.

9. Physical and chemical properties

Identification on basic physical and chemical properties General Information Appearance

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Form: Colour: Odour:	Solid white to off-white characteristic
Change in conditions Melting point/Melting range: Boiling point/Boiling range: Sublimation:	163 - 169°C undetermined no data available
Flash Point:	Not applicable
Flammability (solid, gaseous):	Product is not flammable
Danger of explosion:	Product does not present an explosion hazard.
Density at 20°C:	ca. 1.5 g/cm3
Bulk density at 20°C:	ca. 600 kg/m3
pH-value at 20°C:	4.5 - 6.0
Solubility in / Miscibility with water at 20°C Organic solvents:	650 g/L 0.0%
Solvent content: Organic solvents: VOC (EC): Other information:	0.0% 0.00% No further relevant data available
10. Stability and Reactivity	
Reactivity Chemical stability: Thermal decomposition / conditions to I Possibility of hazardous reactions: Conditions to avoid: Hazardous decomposition products:	be avoided: strong heating No dangerous reactions known. No further relevant information available. No dangerous decomposition products known.
11. Toxicological information	
Primary irritant effect: on the skin: No irritant effect. on the eye: No irritating effect. After inhalation: No irritant effect. Sensitization: No sensitizing effects know Additional information: When used and handled according to spec information provided to us.	on: Quantitative data on the toxicological effect of this product are not available. n. ifications the product does not have any harmful effects to our experience and the on according to the latest version of the EU lists.
12. Ecological Information	
Toxicity Aquatic toxicity: Generally not hazardous Persistence and degradability: No furthe Behaviour in onvicemental systems:	

Behaviour in environmental systems:

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Additional ecological information:

General notes: None

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Results of PBT and vPvB assessment

PBT: Not applicable vPvB: Not applicable Other adverse effects: No further relevant information available.

13. Disposal considerations

Waste treatment methods Product:

Recommendation: Chemicals must be disposed in compliance with the respective national regulations.

Uncleaned/contaminated packaging:

Recommendation:

Disposal must be made according to official regulations. Packaging that may not be cleansed are to be disposed off in the same manner as the product.

14. Transport information	
UN-Number ADR/RID, ADN, IMDG, IATA:	Void
UN proper shipping name ADR/RID, ADN, IMDG, IATA:	Void
Transport hazard class(es) ADR/RID, ADN, IMDG, IATA: Class	Void
Packaging group ADR/RID, IMDG, IATA:	Void
Environmental hazards: Marine pollutant:	No
Special precautions for user:	Not applicable
Transport in bulk according to Annex II MARPOL73/78 and the IBC Code	of Not applicable
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	-

15. Regulatory information

Chemical safety assessment:

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.

16. Other information

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Genaxxon bioscience GmbH, shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Disclaimer

This product is for R&D use only. Not for drug, household or other uses.

Abbreviations and Acronymes:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) IMDG: International Maritime code for Dangerous Goods IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization ACAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) GHS: Globally Harmonized System of Classification and labeling of Chemicals GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent VOC: Volatile Organic Compounds (USA, EU) CAS: Chemical Abstracts Service (division of the American Chemical Society). EINECS: European Inventory of Existing Commercial Chemical Substances.

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