

# Safety data sheet

## according to Regulation (EC) No 1907/2006, Article 31

Printing date 02.09.2024

Version number 4

Revision: 02.09.2024

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:**  $\alpha$ -D-Raffinose-5H<sub>2</sub>O
- **Article number:** 34140
- **CAS Number:**  
17629-30-0
- **EC number:**  
208-146-9
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture:** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
SERVA Electrophoresis GmbH  
Carl-Benz-Str. 7  
D-69115 Heidelberg  
Tel.: +49 6221 13840-0  
FAX: +49 6221 13840-10  
msds.info@serva.de
- **Information department:** Product Safety Department Tel.: +49 6221 13840-35
- **1.4 Emergency telephone number:**  
Emergency medical information in case of poisoning  
Poison Information Centre Mainz-Tel: +49 (0) 6131 19240  
(Counselling in German and English)



### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008:**  
The substance is not classified, according to the GB CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008:** Void
- **Hazard pictograms:** Void
- **Signal word:** Void
- **Hazard statements:** Void
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment:**
- **PBT:** PBT - Assessment not available.
- **vPvB:** vPvB - Assessment not available.
- **Determination of endocrine-disrupting properties** No further relevant information available.

### SECTION 3: Composition/information on ingredients

- **3.1 Substances**
- **CAS No. Description:**  
17629-30-0 Raffinose pentahydrate
- **Identification number(s):**
- **EC number:** 208-146-9
- **Description:**
- **Empirical formula:** C<sub>18</sub> H<sub>32</sub> O<sub>16</sub> \* 5 H<sub>2</sub> O
- **MW:** 594.56

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### SECTION 4: First aid measures

- **4.1 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:**  
Wash off immediately with soap and water and rinse thoroughly. In case of complaints, consult a doctor.
- **After eye contact:**  
Rinse opened eye for several minutes with running water. Remove contact lenses, if possible, and continue rinsing. In case of complaints, consult an ophthalmologist.
- **After swallowing:**  
Rinse out mouth. Drink plenty of water and provide fresh air. Consult a doctor in case of complaints.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture:**  
Formation of hazardous vapours and gases possible during heating or in case of fire.  
In case of fire, the following can be formed, but not limited to:  
Carbon monoxide and carbon dioxide
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained breathing apparatus.
- **Additional information**  
Collect contaminated fire fighting water separately. It must not enter the sewage system.  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.  
Ensure adequate ventilation
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up**  
Dispose contaminated material as waste according to section 13.  
Pick up mechanically.
- **6.4 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.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling:**  
Ensure good ventilation/exhaustion at the workplace.  
No special measures required.  
Prevent formation of dust.
- **Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke.

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- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store containers tightly closed and dry.
- **7.3 Specific end use(s):** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls:** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment:**
- **General protective and hygienic measures:**
  - Keep away from foodstuffs, beverages and feed.
  - Store protective clothing separately.
  - Immediately remove all soiled and contaminated clothing
  - Avoid contact with the eyes and skin.
  - Wash hands before breaks and at the end of work.
- **Breathing equipment:** Suitable respiratory protective device recommended.
- **Hand protection:**
  - The glove material has to be impermeable and resistant 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.
- **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 of a maximum of 15 minutes gloves made of the following materials are suitable:**
  - Natural rubber, NR
  - Nitrile rubber, NBR
- **Eye/face protection:** Safety glasses
- **Body protection:** Protective work clothing.

### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information:**
- **Physical state:** Solid.
- **Colour:** White
- **Odour:** Characteristic
- **Odour threshold:** Not determined.
- **Melting point/freezing point:** 78-82 °C
- **Boiling point or initial boiling point and boiling range:** No information available
- **Flammability:** No information available

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· <b>Lower and upper explosion limit:</b>	
· <b>Lower:</b>	No information available
· <b>Upper:</b>	No information available
· <b>Flash point:</b>	Not applicable
· <b>Decomposition temperature:</b>	No information available
· <b>pH:</b>	5-7
· <b>Viscosity:</b>	
· <b>Kinematic viscosity:</b>	No information available
· <b>Dynamic viscosity:</b>	No information available
· <b>Solubility:</b>	
· <b>Water:</b>	Soluble
· <b>Partition coefficient n-octanol/water (log value):</b>	No information available
· <b>Vapour pressure:</b>	No information available
· <b>Density and/or relative density:</b>	
· <b>Density:</b>	No information available
· <b>Relative density:</b>	No information available
· <b>Particle characteristics</b>	No information available
· <b>9.2 Other information</b>	
· <b>Appearance:</b>	
· <b>Form:</b>	Crystalline powder
· <b>Important information on protection of health and environment, and on safety:</b>	
· <b>Explosive properties:</b>	The product is not explosive, but the formation of explosive dust/air mixtures is possible.
· <b>Molecular weight</b>	594.56 g/mol

### SECTION 10: Stability and reactivity

- **10.1 Reactivity:** No further relevant information available.
- **10.2 Chemical stability:**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions:** No dangerous reactions known
- **10.4 Conditions to avoid:** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** In case of fire: see section 5

### SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:**
- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **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.
- **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.
- **11.2 Information on other hazards:**
- **Endocrine disrupting properties:** No relevant information available

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## SECTION 12: Ecological information

- **12.1 Toxicity:**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability:** No further relevant information available.
- **12.3 Bioaccumulative potential:** No further relevant information available.
- **12.4 Mobility in soil:** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment:**
- **PBT:** PBT - assessment not available.
- **vPvB:** vPvB - assessment not available.
- **12.6 Endocrine disrupting properties:** For information on endocrine disrupting properties see section 11.
- **12.7 Other adverse effects:**
- **Additional ecological information:**
- **General notes:**  
Do not allow product to reach ground water, water course or sewage system.  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

## SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Dispose of in accordance with official regulations.
- **Uncleaned packagings:**
- **Recommendation:**  
Uncleaned packaging must be disposed of in the same way as the product in accordance with official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## SECTION 14: Transport information

- |                                                                       |                                                      |
|-----------------------------------------------------------------------|------------------------------------------------------|
| · <b>14.1 UN number or ID number</b>                                  |                                                      |
| · <b>ADR, ADN, IMDG, IATA</b>                                         | Void                                                 |
| · <b>14.2 UN proper shipping name</b>                                 |                                                      |
| · <b>ADR, ADN, IMDG, IATA</b>                                         | Void                                                 |
| · <b>14.3 Transport hazard class(es)</b>                              |                                                      |
| · <b>ADR, ADN, IMDG, IATA</b>                                         |                                                      |
| · <b>Class:</b>                                                       | Void                                                 |
| · <b>14.4 Packing group</b>                                           |                                                      |
| · <b>ADR, IMDG, IATA</b>                                              | Void                                                 |
| · <b>14.5 Environmental hazards</b>                                   | Not applicable.                                      |
| · <b>14.6 Special precautions for user</b>                            | Not applicable.                                      |
| · <b>14.7 Maritime transport in bulk according to IMO instruments</b> | Not applicable.                                      |
| · <b>Transport/Additional information:</b>                            | Not dangerous according to the above specifications. |
| · <b>UN "Model Regulation":</b>                                       | Void                                                 |

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### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Poisons Act**
- **Regulated explosives precursors** Substance is not listed.
- **Regulated poisons** Substance is not listed.
- **Reportable explosives precursors** Substance is not listed.
- **Reportable poisons** Substance is not listed.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**  
Substance is not listed.
- **REGULATION (EU) 2019/1148**
- **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**  
Substance is not listed.
- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS** Substance is not listed.
- **Regulation (EC) No 273/2004 on drug precursors** Substance is not listed.
- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**  
Substance is not listed.
- **National regulations:**
- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Product Safety Department
- **Contact:** +49 6221 13840-35
- **Date of previous version:** 02.05.2018
- **Abbreviations and acronyms:**
  - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  - ICAO: International Civil Aviation Organisation
  - PBT: persistent, bioaccumulative, toxic substance (UK REACH)
  - vPvB: very persistent, very bioaccumulative substance (UK REACH)
  - UK REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
  - GB CLP: Regulation on classification, labelling and packaging of substances and mixtures
  - bw: body weight
  - ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - IATA: International Air Transport Association
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative

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