

Safety Data Sheet
acc. to OSHA HCS

Printing date 08/16/2023

Reviewed on 08/16/2023

1 Identification

- **Product identifier**
- **Trade name:** DOBA 2% galactose, 1% raffinose
- **Article number:** 4026912
- **Application of the substance / the mixture** For Research or Further Manufacturing Use.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
MP Biomedicals, LLC
29525 Fountain Parkway
Solon, OH 44139
United States
www.mpbio.com
- **Information department:** Quality Control Department
- **Emergency telephone number:** CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Hazard(s) identification

- **Classification of the substance or mixture**
The product is not classified, according to the Globally Harmonized System (GHS).

- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



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

3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture: consisting of the following components.

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· Dangerous components:

CAS: 10043-52-4 EINECS: 233-140-8 RTECS: EV 9800000	Calcium Chloride	1-2.5%
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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.
- **After eye contact:** Flush eyes with running water as a precaution.
- **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 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **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**
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.
- **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.
- **Protective Action Criteria for Chemicals**

· PAC-1:

7783-20-2	Ammonium Sulfate	13 mg/m ³
7778-77-0	Potassium Phosphate Monobasic Anhydrous	9.6 mg/m ³
7487-88-9	magnesium sulphate	20 mg/m ³
10043-52-4	Calcium Chloride	12 mg/m ³
150-13-0	p-Aminobenzoic Acid	15 mg/m ³
10043-35-3	boric acid	6 mg/m ³
7446-20-0	Zinc Sulfate heptahydrate	27 mg/m ³
10034-96-5	Manganese Sulfate Monohydrate	9.2 mg/m ³

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7631-95-0	Sodium Molybdate	3.2 mg/m ³
7705-08-0	iron trichloride	8.7 mg/m ³
7681-11-0	Potassium Iodide	1.3 mg/m ³
7758-98-7	copper sulphate	7.5 mg/m ³

· PAC-2:

7783-20-2	Ammonium Sulfate	140 mg/m ³
7778-77-0	Potassium Phosphate Monobasic Anhydrous	110 mg/m ³
7487-88-9	magnesium sulphate	220 mg/m ³
10043-52-4	Calcium Chloride	130 mg/m ³
150-13-0	p-Aminobenzoic Acid	69 mg/m ³
10043-35-3	boric acid	23 mg/m ³
7446-20-0	Zinc Sulfate heptahydrate	170 mg/m ³
10034-96-5	Manganese Sulfate Monohydrate	15 mg/m ³
7631-95-0	Sodium Molybdate	17 mg/m ³
7705-08-0	iron trichloride	30 mg/m ³
7681-11-0	Potassium Iodide	15 mg/m ³
7758-98-7	copper sulphate	9.9 mg/m ³

· PAC-3:

7783-20-2	Ammonium Sulfate	840 mg/m ³
7778-77-0	Potassium Phosphate Monobasic Anhydrous	630 mg/m ³
7487-88-9	magnesium sulphate	1,300 mg/m ³
10043-52-4	Calcium Chloride	790 mg/m ³
150-13-0	p-Aminobenzoic Acid	410 mg/m ³
10043-35-3	boric acid	830 mg/m ³
7446-20-0	Zinc Sulfate heptahydrate	1,000 mg/m ³
10034-96-5	Manganese Sulfate Monohydrate	90 mg/m ³
7631-95-0	Sodium Molybdate	100 mg/m ³
7705-08-0	iron trichloride	180 mg/m ³
7681-11-0	Potassium Iodide	87 mg/m ³
7758-98-7	copper sulphate	59 mg/m ³

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Keep away from open flames, hot surface and sources of ignitions
- **Information about protection against explosions and fires:** No special requirements.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:** 15-30°C
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Further information about storage conditions:**
- **Specific end use(s)** No further relevant information available.

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8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see Section 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**
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. 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.
- **Eye protection:** Not required.

9 Physical and chemical properties

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|--|------------------------------------|
| · Information on basic physical and chemical properties | |
| · General Information | |
| · Appearance: | |
| Form: | According to product specification |
| Color: | According to product specification |
| · Odor: | Indeterminate |
| · Odor threshold: | Not determined. |
| · pH-value: | Not applicable. |
| · Change in condition | |
| Boiling point/Boiling range: | Undetermined. |
| · Flash point: | Not applicable. |
| · Flammability (solid, gaseous): | Not determined. |
| · Decomposition temperature: | Not determined. |
| · Ignition temperature: | Product is not selfigniting. |
| · Danger of explosion: | See section 10 |
| · Explosion limits: | |
| Lower: | Not Applicable |

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Upper:	Not Applicable
· Vapor pressure:	Not applicable.
· Density:	Not Applicable
· Relative density	Not determined.
· Vapor density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	Not Determined
· Water:	Easily soluble.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Solvent content:	
VOC content:	0.00 %
Solids content:	100.0 %
· Other information	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.
Avoid contact with acids. Contact liberates a toxic gas.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritant and potentially harmful
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product is not subject to classification according to internally approved calculation methods for preparations:
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)

150-13-0	p-Aminobenzoic Acid	3
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· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Behavior 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 (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.

· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Can not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**

· **Recommendation:** Discard must be made according to official regulations.

· **Recommended cleansing agent:** Water, if necessary with cleaning agents.

14 Transport information

· **UN-Number**

· **DOT, ADR, IMDG, IATA** Not regulated

· **UN proper shipping name**

· **DOT, ADR, IMDG, IATA** Not regulated

· **Transport hazard class(es)**

· **DOT, ADR, IMDG, IATA**

· **Class** Not regulated

· **Packing group**

· **DOT, ADR, IMDG, IATA** Not regulated

· **Environmental hazards:**

Not applicable.

· **Special precautions for user**

Not applicable.

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· **Transport in bulk according to Annex II of MARPOL73/78 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**

No further relevant information available.

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

7783-20-2 Ammonium Sulfate

10034-96-5 Manganese Sulfate Monohydrate

7758-98-7 copper sulphate

· **TSCA (Toxic Substances Control Act):**

7783-20-2 Ammonium Sulfate

ACTIVE

7778-77-0 Potassium Phosphate Monobasic Anhydrous

ACTIVE

7487-88-9 magnesium sulphate

ACTIVE

59-23-4 D-(+)-Galactose Anhydrous, cell culture reagent

ACTIVE

7647-14-5 Sodium Chloride

ACTIVE

10043-52-4 Calcium Chloride

ACTIVE

87-89-8 D-myo-Inositol

ACTIVE

150-13-0 p-Aminobenzoic Acid

ACTIVE

10043-35-3 boric acid

ACTIVE

58-56-0 Pyridoxine Hydrochloride

ACTIVE

59-67-6 nicotinic acid

ACTIVE

67-03-8 Thiamine Hydrochloride

ACTIVE

137-08-6 D-Pantothenic Acid Calcium Salt

ACTIVE

7631-95-0 Sodium Molybdate

ACTIVE

7705-08-0 iron trichloride

ACTIVE

83-88-5 riboflavin

ACTIVE

7681-11-0 Potassium Iodide

ACTIVE

7758-98-7 copper sulphate

ACTIVE

58-85-5 D-Biotin

ACTIVE

59-30-3 Folic Acid

ACTIVE

· **Hazardous Air Pollutants**

10034-96-5 Manganese Sulfate Monohydrate

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

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· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

10043-35-3	boric acid	I (oral)
10034-96-5	Manganese Sulfate Monohydrate	D

· **TLV (Threshold Limit Value)**

10043-35-3	boric acid	A4
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· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements** Void

· **Hazard pictograms** Void

· **Signal word** Void

· **Hazard statements** Void

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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:** Quality Control Dept.

· **Contact:**

· **Date of preparation / last revision** 08/16/2023

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