

Zetadex Gel Filtration Matrix (Hydrated in PBS / 0.02 % NaN₃)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Issue date: 5/10/2023 Revision date: 9/1/2023

Supersedes version of: 5/26/2023 Version: 2.0

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

1.1. Product identifier

Product form	: Mixture
Trade name	: Zetadex Gel Filtration Matrix (Hydrated in PBS / 0.02 % NaN ₃)
Product code	: TM-0107; TM-0108; TM-0120; TM-0121; TM-0130; TM-0132
Type of product	: Size exclusion chromatography
Synonyms	: Pre-hydrated gel filtration matrix with cross-linked beaded spherical dextran composite; ZDX, Zetadex-25 or Zetadex-50
Product group	: End product

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

1.2.1. Relevant identified uses

Main use category	: Professional use, Laboratory chemical
Industrial/Professional use spec	: For professional use only Industrial
Use of the substance/mixture	: Substance manufacture Laboratory chemicals
Function or use category	: Laboratory chemicals

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

emp Biotech GmbH
Robert-Rössle-Str. 10
13125 Berlin - Deutschland
T +49 (0)30 94 89 22 01 (Monday-Friday, 9:00 am-5:00 pm) - F +49 (0)30 94 89 32 01
info@empbiotech.com - www.empbiotech.com

1.4. Emergency telephone number

Emergency number	: Giftnotruf Berlin +49 30 30686700 (Beratung in Deutsch), 24 Stunden, 7 Tage/Woche; International: INFOTRAC +1-352-323-3500 (Phone) or in the US 800-535-5053 (toll-free), 24 hours/day, 7 days/week
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Labelling according to Directive 67/548/EEC or 1999/45/EC

2.3. Other hazards

Other hazards which do not result in classification	: This substance / mixture does not contain any components of 0.1% or higher that are either classified as persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).
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Contains no PBT/vPvB substances \geq 0.1% assessed in accordance with REACH Annex XIII

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium azide	(CAS-No.) 26628-22-8 (EC-No.) 247-852-1 (EC Index-No.) 011-004-00-7 (REACH-no) 01-2119457019-37	< 0.1	Acute Tox. 1 (Oral), H300 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
DEXTRAN	(CAS-No.) 9004-54-0 (EC-No.) 232-677-5		Not classified
phosphate buffered saline			Not classified

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Consult a doctor. Show this safety data sheet to the doctor in attendance.
First-aid measures after inhalation	: Move person to fresh air and ensure comfortable breathing. In case of respiratory arrest, ventilate artificially.
First-aid measures after skin contact	: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Ask for medical advice.
First-aid measures after eye contact	: Rinse eyes with water as a precaution. Remove contact lenses, if possible. Continue rinsing. Ask for medical advice.
First-aid measures after ingestion	: Rinse mouth out with water. Do not give an unconscious person anything to drink. Do not induce vomiting. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: The most important known symptoms and effects are described on the label (see 2.2) and / or in section 11.
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4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Dry chemical, CO ₂ , alcohol-resistant foam or waterspray.
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5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	: Carbon oxides.
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5.3. Advice for firefighters

Protection during firefighting	: Wear self-contained breathing apparatus for firefighting if necessary.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	: For personal protection see section 8.
Emergency procedures	: Avoid breathing vapours, dust, mist, gas. Avoid creating or spreading dust.

6.1.2. For emergency responders

Protective equipment	: Wear recommended personal protective equipment.
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6.2. Environmental precautions

Do not allow to enter drains or water courses.

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6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

Information on exposure controls/personal protective equipment and on Instructions for disposal can be found in sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid breathing vapours, dust, mist, gas. Avoid dust formation. Reduce/avoid exposure and/or contact.
Hygiene measures : Remove contaminated clothes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed in a well-ventilated, dry place. Store in cool place.
Storage area : Storage class (TRGS 510): See section 15.1.2.

7.3. Specific end use(s)

Scientific research and development. Production.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Zetadex Gel Filtration Matrix (Hydrated in PBS / 0.02 % NaN ₃)	
Germany	Contains no substances with occupational exposure limits
Sodium azide (26628-22-8)	
Germany	Contains no substances with occupational exposure limits
phosphate buffered saline	
Germany	Contains no substances with occupational exposure limits

8.2. Exposure controls

Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Hand protection:

Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Eye protection:

Wear closed safety glasses. EN 166

Skin and body protection:

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection:

No respiratory protection needed under normal use conditions



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Environmental exposure controls:

Do not let product enter drains. Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Pre-hydrated powder.
Colour	: White.
Odour	: No data available
Odour threshold	: No data available
pH	: 7.4
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under the specified storage conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

In the event of fire: see section 5.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

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Sodium azide (26628-22-8)	
LD50 oral rat	27 mg/kg FMCHA2 Farm Chemicals Handbook. (Meister Pub., 37841 Euclid Ave., Willoughy, OH 44094), Pg. C32, 1991. (RTECS)
LD50 dermal rabbit	20 mg/kg FMCHA2 Farm Chemicals Handbook. (Meister Pub., 37841 Euclid Ave., Willoughy, OH 44094), Pg. C32, 1991. (RTECS)
Skin corrosion/irritation	: Not classified pH: 7.4
Serious eye damage/irritation	: Not classified pH: 7.4
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Other information	: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1. Toxicity

Sodium azide (26628-22-8)	
LC50 - Fish [1]	2.8 (0.68 – 5.46) mg/l Study number: 6 Reference for median: Klaverkamp, J.F., A. Kenney, S.E. Harrison, and R. Danell 1975. An Evaluation of Phenol and Sodium Azide as Reference Toxicants in Rainbow Trout. In: Proc.2nd Annual Aquatic Toxicity Workshop, 1975, Ontario Ministry of the Environ., Freshwater Inst., Winnipeg, Manitoba, Canada :73-92
EC50 - Crustacea [1]	9 (9 – 9) mg/l Study number: 1 Reference for median: Sanders, H.O. 1969. Toxicity of Pesticides to the Crustacean Gammarus lacustris. Tech.Pap.No.25, U.S.D.I., Bur.Sports Fish.Wildl., Fish Wildl.Serv., Washington, DC :18 p. (Author Communication Used) (Used with Reference 732) (Publ in Part As 6797)
EC50 - Crustacea [2]	5.3 (4.2 – 6.4) mg/l Study number: 2 Reference for median: Mayer, F.L.Jr., and M.R. Ellersieck 1986. Manual of Acute Toxicity: Interpretation and Data Base for 410 Chemicals and 66 Species of Freshwater Animals. Resour.Publ.No.160, U.S.Dep.Interior, Fish Wildl.Serv., Washington, DC :505 p. (USGS Data File)
EC50 96h - Algae [1]	0.348 (0.348 – 0.348) mg/l Study number: 1 Reference for median: Hickey, C.W., C. Blaise, and G. Costan 1991. Microtesting Appraisal of ATP and Cell Recovery Toxicity End Points After Acute Exposure of Selenastrum capricornutum to Selected Chemicals. Environ.Toxicol.Water Qual. 6(4):383-403

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Zetadex Gel Filtration Matrix (Hydrated in PBS / 0.02 % NaN3)	
Results of PBT assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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Component	
phosphate buffered saline	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Offer surplus and non-recyclable solutions to a licensed disposal company.
Product/Packaging disposal recommendations : Contaminated packaging to be disposed as unused product.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
14.1. UN number		
Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name		
Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Not applicable	Not applicable	Not applicable
No supplementary information available		

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

Regulatory reference : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1)

WGK remark : internal company classification

Storage class (LGK, TRGS 510) : LGK 12 - Non-combustible liquids

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Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG)
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

15.2. Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 1 (Oral)	Acute toxicity (oral), Category 1
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
H300	Fatal if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

MSDS (Reach Anhang II) EMP

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.