

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Trade name: Enzyme reactor AOD (Application Ethanol/Methanol)

Revision date: 02 May 2024

Version: 4

Replace version: 3

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

1.1. Product identifier

Product name: Enzyme reactor AOD (Application Ethanol/Methanol)

Part number: 811.100.120 and 811.100.102

Other means of identification: BPT0048

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

Relevant identified uses: Enzyme reactor for the purpose of analysis of ethanol and methanol

Uses advised against: No information available

1.3 Details of the supplier of the safety data sheet

Company: 908 Devices GmbH

Rebenring 31

38106 Braunschweig

Germany

Phone: +49 531-209008-0

Email: info.eu@908devices.com

Homepage: www.908devices.com

Emergency phone no.: +1 844 908 - 4357

2. Hazards identification

2.1 Classification of the substance or mixture

Not a hazardous mixture according to Regulation (EC) No. 1272/2008.

Based on available data, the classification criteria (CLP Classification) are not met.

2.2 Label elements

None required.

2.3 Other hazards

No information available.

3. Composition / Information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

Cartridges filled with immobilized alcohol oxidase (AOD).

The mixture is solid.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Trade name: Enzyme reactor AOD (Application Ethanol/Methanol)

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4. First aid measures

4.1 Description of first aid measures

General information: Special action is not required.

Following inhalation: Not applicable.

Following skin contact: Not applicable.

Following eye contact: Not applicable.

Following ingestion: No data available.

4.2 Most important symptoms and effects, both acute and delayed: None.

4.3 Indication of any immediate medical attention and special treatment needed

Special action is not required.

5. Firefighting measures

5.1 Extinguishing media:

- **Suitable extinguishing media:** No data available.

- **Unsuitable extinguishing media:** No data available.

5.2 Special hazards arising from the substance or mixture: The product is noncombustible, extinguishing measures to be harmonized with the environment.

5.3 Advice for firefighters: The product itself does not burn.

In case of surrounding fires: Wear self-contained breathing apparatus.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: None.

For emergency responders: Personal protection, see section 8.

6.2 Environmental precautions: None.

6.3 Methods and materials for containment and cleaning up:

Disposal with household garbage.

6.4 Reference to other sections: Safety precautions see section 8 and 13.

Safety Data Sheet

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7. Handling and storage

7.1 Precautions for safe handling: Special action is not required.

Advice on general occupational hygiene:

- Do not drink, eat and smoke in the laboratory.
- Washing the hands after using.
- Take off the lab coat and protective equipment outside of the laboratory.

Advice on fire and explosion protection: No data available.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessel

- Store in the dark at 2-8°C.
- Storage in the cartridge filled with ready to use buffer.

Hints on joint storage: Do not store together with food.

Storage class: 13 = noncombustible solids.

7.3 Specific end uses

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. Exposure controls / personal protection

8.1 Control parameters / Components with workplace control parameters

Contains not any harmful substances with occupational exposure limit values for intended use.

Contains not any hazardous materials with biological limit values for intended use.

8.2 Occupational exposure controls

8.2.1 Appropriate engineering controls

General industrial hygiene practice.

8.2.2 Personal protective equipment

Eye/face protection:

Not required.

Skin protection:

Protective gloves according to EN 374 (EC).

The glove material has to be impermeable and resistant to the product / the substance / the mixture. Due to missing tests no recommendation to the glove material can be given for the product / the substance / the mixture.

Break through time: >480 min.

Observe glove manufacturer`s instructions concerning penetrability and break through time.

Body protection: Lab coat.

Respiratory protection: Breathing protection is not required.

8.2.3 Environmental exposure controls:

The product is not classified as water hazard.

Safety Data Sheet

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9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

- Form: Solid.

- Colour: Reddish.

Odour: Odourless.

Odour threshold: No data available.

pH-value at 20°C: Not applicable

Melting point/freezing point: No data available.

Boiling point and boiling range: Not applicable.

Flash point: Not applicable.

Evaporation rate: No data available.

Flammability (solid/gas): No data available.

Upper/lower flammability of explosive limits: No data available.

Vapour pressure at 20°C: Not applicable.

Vapour density: No data available.

Relative density at 20°C: Not applicable.

Water solubility: Not applicable.

Partition coefficient: n-octanol/water: No data available.

Auto-ignition temperature: No data available.

Decomposition temperature: No data available.

Viscosity: No data available.

Explosive properties: The product does not represent an explosive hazard.

Oxidizing properties: No data available.

Other safety information: None.

10. Stability and reactivity

Reactivity: No data available.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid: No decomposition if used according to specifications.

Incompatible materials: No data available.

Hazardous decomposition products: No dangerous decomposition products known.

11. Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No. 1272/2008

Acute Toxicity: The mixture is not classified in acute toxicity.

Skin corrosion / irritation: No irritation effects known.

Serious eye damage / eye irritation: The mixture is not classified in serious eye damage/irritation.

Respiratory or skin sensitization: No sensitizing effects known.

Germ cell mutagenicity: The mixture contains no relevant substances.

Carcinogenicity: The mixture contains no relevant substances.

Reproductive toxicity: The mixture contains no relevant substances.

Specific target organ toxicity – single exposure: The mixture contains no relevant substances.

Specific target organ toxicity – repeated exposure: The mixture contains no relevant substances.

Aspiration hazard: The mixture contains no relevant substances.

Safety Data Sheet

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11.2 Information on other hazards:

11.2.1 Endocrine disrupting properties No data available.

11.2.2 Additional information

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12. Ecological information

Toxicity: Contains no substances known to be hazardous to the environment.

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Results of PBT- and vPvB assessment: No data available.

Endocrine disrupting properties No data available.

Other adverse effects: No data available.

13. Disposal considerations

Waste treatment methods

Product: Disposal with household garbage.

Contaminated packaging: Disposal according to official regulations.

Waste key number according to waste regulation: 16 05 09 (used chemicals).

Special precautions: None.

Relevant EC or other regulations: None.

14. Transport information

UN No.: Not applicable.

UN Proper shipping name: ADR/RID: - IMDG: - ICAO-TI: - IATA-DGR: -

Transport hazard class: Not applicable.

Packing group: Not applicable.

Environmental hazards: No hazards identified.

Special precautions for user: No dangerous good, see section 6-8.

Maritime transport in bulk according to IMO instruments: Not applicable.

15. Regulatory information

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

EU Regulations

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer: Not applicable.

Regulation (EC) No 850/2004 on persistent organic pollutants: Not applicable.

Regulation (EC) No 649/2012 concerning the export and import of dangerous materials: Not applicable.

Regulation (EC) No 648/2004 on detergents: Not applicable.

Authorization according to title VII of regulation (EC) No 1907/2006: Not applicable.

Restrictions according to title VIII of regulation (EC) No 1907/2006: Not applicable.

This safety data sheet complies with the requirements of regulation (EC) No 1907/2006.

Labelling according to EU-Regulations: Observe the general safety regulations when handling chemicals.

This product is not subject to specific labelling according to Regulation (EC) No. 1272/2008.

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International Inventories: X=Listed

All chemical substances used in this product are listed in the following chemical substance inventory.

| Europe (ECHA) | USA (TSCA) | Canada (DSL) | Philippines (PICCS) | China (IECSC) | Japan (ENCS) | Taiwan (TCSI) | Korea (KECI) | Australia (AICS) | New Zealand (NZIoC) |
|---------------|------------|--------------|---------------------|---------------|--------------|---------------|--------------|------------------|---------------------|
| X | X | X | - | - | X | X | X | - | X |

National regulations:

Water hazard class: The product is not classified as water hazard.

Technical guideline for the handling of hazardous materials (TRGS): Not applicable.

Solvent regulation (31-BImSchv): Not applicable.

15.2 Chemical Safety Assessment: For this product a chemical safety assessment is not required.

16. Other Information

Indication of changes: Update of every section according to regulation (EC) No. 2020/878 amending Annex II to regulation (EC) No 1907/2006.

Key literature references and sources for data:

- REACH regulation (EC) No. 1907/2006, last amended by regulation (EC) No. 2020/878.
- Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures.

Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008:

Evaluation based on test data.

Legend:

ADR/RID: European Agreement Concerning the International Carriage of Dangerous Goods Code

IMO/IMDG: International Maritime Organization/International Maritime Dangerous Goods Code

ICAO/IATA: International Civil Aviation Organization/International Air Transport Association

IMO: International Maritime Organization

PBT: Persistent, Bioaccumulative, Toxic

vPvB: very Persistent and very Bioaccumulative

Training advice: Chemical hazard awareness training, incorporating labelling, safety data sheets, personal equipment and hygiene.

Further information:

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