

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date: 29.02.2024

Version No: 2.00 (replaces version 1.00)

Revision: 29.02.2024

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

Product identifier

Please refer to attached coversheet for the exact product list

Trade name: Rho-1D4 Agarose / Rho-1D4 MagBeads

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

Application of the substance / the preparation: Chemical for R&D

Uses advised against: No further relevant information available.

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Cube Biotech GmbH
 Creative-Campus-Allee 12
 40789 Monheim
 Tel.: +49 (0) 2173 99373 0
 E-mail: contact@cube-biotech.com

Emergency telephone number: +49 (0) 2173 99373 0 (during business hours)

2 Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 3 H226 Flammable liquid and vapour.

Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS02

Signal word Warning

Hazard statements

H226 Flammable liquid and vapour.

Precautionary statements

- | | |
|----------------|--|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground and bond container and receiving equipment. |
| P241 | Use explosion-proof [electrical/ventilating/lighting] equipment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. |
| P403+P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulations. |

Other hazards

Results of PBT and vPvB assessment

PBT: Not determined.

vPvB: Not determined.

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3 Composition/information on ingredients

Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 64-17-5	ethanol	10 - < 24%
EC number: 200-578-6	Flam. Liq. 2, H225; Eye Irrit. 2, H319	
Index number: 603-002-00-5	Specific concentration limit: Eye Irrit. 2; H319: C ≥ 50 %	
Reg.nr.: 01-2119457610-43-XXXX		

Additional information:

For the wording of the listed hazard phrases refer to section 16.

Product contains a substance with limited available safety information, and should therefore be handled with care.

4 First aid measures

Description of first aid measures

General information:

Take affected persons out of danger area and lay down.

In case of irregular breathing or respiratory arrest provide artificial respiration.

After inhalation: Supply fresh air; consult doctor in case of complaints.**After skin contact:** Immediately wash with water and soap and rinse thoroughly.**After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.**After swallowing:** Call a doctor immediately.

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 Firefighting measures

Extinguishing media

Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire extinguishing methods suitable to surrounding conditions.

For safety reasons unsuitable extinguishing agents: Water with full jet**Special hazards arising from the substance or mixture** Can form explosive gas-air mixtures.

Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.

Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Wear protective clothing.

Keep away from ignition sources.

Use respiratory protective device against the effects of fumes/dust/aerosol.

Environmental precautions: Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of the material collected according to regulations.

Ensure adequate ventilation.

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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

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Keep receptacles tightly sealed.

Open and handle receptacle with care.

Work only in fume cupboard.

Use only in well ventilated areas.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Information about fire and explosion protection:

Keep ignition sources away - Do not smoke.

Protect from heat.

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:** Store away from flammable substances.**Further information about storage conditions:**

Keep container tightly sealed.

Store receptacle in a well ventilated area.

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

8 Exposure controls/personal protection

Control parameters**Ingredients with limit values that require monitoring at the workplace:****CAS: 64-17-5 ethanol**

OEL (Ireland) Short-term value: 1000 ppm

DNELs**CAS: 64-17-5 ethanol**

Oral DNEL(long/systemic) 87 mg/kg bw/day (Consumer)

Dermal DNEL(long/systemic) 206 mg/kg bw/day (Consumer)

353 mg/kg bw/day (Workers (Industrial/Professional))

Inhalative DNEL(long/systemic) 114 mg/m³ (Consumer)950 mg/m³ (Workers (Industrial/Professional))**PNECs****CAS: 64-17-5 ethanol**

PNEC(aqua) 0.96 mg/L (freshwater)

0.79 mg/L (marine water)

2.75 mg/L (intermittent release)

PNEC(STP) 580 mg/L (sewage treatment plant)

PNEC(sediment) 3.6 mg/kg sedi. dw (freshwater)

2.9 mg/kg sedi. dw (marine water)

PNEC(soil) 0.63 mg/kg soil dw (soil)

PNEC(oral) 380 mg/kg food (Consumer)

Exposure controls**Appropriate engineering controls** No further data; see section 7.

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Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

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

Immediately remove all soiled and contaminated clothing.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.

Hand protection



Protective gloves

Only use chemical-protective gloves with CE-labelling of category III.

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

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves

Butyl rubber, BR (≥ 0.5 mm)

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/face protection



Tightly sealed goggles

Body protection: Protective work clothing

Environmental exposure controls No further relevant information available.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Physical state

Liquid

Form:

Suspension

Colour:

According to product specification

Odour:

Characteristic

Odour threshold:

Not determined.

Melting point/freezing point:

Not determined.

Boiling point or initial boiling point and boiling range

Not determined.

Flammability

Not applicable.

Lower and upper explosion limit

Lower:

3.5 Vol %

Upper:

15 Vol %

Flash point:

> 23 °C

Auto-ignition temperature:

425 °C

Decomposition temperature:

Not determined.

pH

Not determined.

Viscosity:

Kinematic viscosity

Not determined.

Dynamic:

Not determined.

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Solubility

water: Dispersible.

Partition coefficient n-octanol/water (log value)

64-17-5 ethanol - 0,35 logPow (24 °C, OECD Guideline107)

Vapour pressure at 20 °C: 59 hPa**Density and/or relative density****Density:** Not determined.**Relative density** Not determined.**Vapour density** Not determined.**Relative gas density** Not determined.**Particle characteristics** Not applicable.**Other information****Explosive properties:** Product does not present an explosion hazard.**Oxidising properties** No**Evaporation rate** Not determined.**Information with regard to physical hazard****classes****Flammable liquids** Flammable liquid and vapour.**10 Stability and reactivity****Reactivity** No further relevant information available.**Chemical stability** No decomposition if used and stored according to specifications.**Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

Possibility of hazardous reactions Forms explosive gas mixture with air.**Conditions to avoid** No further relevant information available.**Incompatible materials:** No further relevant information available.**Hazardous decomposition products:**

Flammable gases/vapours

Carbon monoxide and carbon dioxide

11 Toxicological information**Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity** Based on available data, the classification criteria are not met.**LD/LC50 values relevant for classification:****CAS: 64-17-5 ethanol**

Oral LD50 10470 mg/kg (Rat) (OECD Guideline 401)

Inhalative LC50 (4h) 124.7 mg/L (Rat) (OECD Guideline 403, inhalation:vapour)

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.**Information on other hazards****Endocrine disrupting properties**

None of the ingredients is listed.

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12 Ecological information

Toxicity

Aquatic toxicity:

CAS: 64-17-5 ethanol

LC50 (48h) (static) 5012 mg/L (Daphnia) (ASTM E729-80, Ceriodaphnia dubia)
nominal

LC50 (96h) (dynamic) 11200 mg/L (fish) (US EPA method E03-05, Pimephales promelas)

EC10 (static) 86 mg/L (algae) (OECD Guideline 201, Chlorella vulgaris)
4d, nominal

EC50 (static) 675 mg/L (algae) (OECD Guideline 201, Chlorella vulgaris)
4d, nominal

NOEC 2 mg/L (Daphnia) (Ceriodaphnia dubia)
10d,
nominal

250 mg/L (fish) (OECD Guideline 212, Danio rerio)
120h

Persistence and degradability

64-17-5 ethanol 84 % (20d)

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Results of PBT and vPvB assessment Not determined.

Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation:

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

Uncleaned packaging

Recommendation: Disposal must be made according to official regulations.

14 Transport information

UN number or ID 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

Packing group

ADR/RID/ADN, IMDG, IATA Void

Environmental hazards: Not applicable.

Special precautions for user Not applicable.

Maritime transport in bulk according to IMO instruments Not applicable.

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Transport/Additional information:
UN "Model Regulation":

Not dangerous according to the above specifications.
 Void

15 Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

Seveso category P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements 5000 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 50000 t

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

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.

Relevant phrases

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

Version number of previous version: 1.00

Abbreviations and acronyms:

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

MARPOL: (from Marine Pollutant) International Convention for the Prevention of Marine Pollution from Ships

IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

UN: United Nations (also UNO: United Nations Organization)

NOEC: No Observed Effect Concentration

OECD: Organisation for Economic Co-operation and Development

ASTM: American Society for Testing and Materials

WAF: Water Accommodated Fraction

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

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

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vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
