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

Product identifier

Trade name: PureCube Ni-IDA Agarose / Mag Beads, PureCube Co-IDA Agarose / Mag Beads

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

No further relevant information available.

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

Uses advised against: No further information available.

Details of the supplier of the safety data sheet

Manufacturer/Supplier: Cube Biotech GmbH Alfred-Nobel-Straße 10 40789 Monheim

Tel.: +49 (0) 2173 99373 0 Email: contact@cube-biotech.com

Further information obtainable from: Cube Biotech GmbH

Emergency telephone number:

Cube Biotech GmbH +49 (0) 2173 99373 0

2 Hazards identification

Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008:



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS08 health hazard

Resp. Sens. 1B H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Carc. 2 H351 Suspected of causing cancer.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Sens. 1B H317 May cause an allergic skin reaction.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC:



Xn; Harmful

R22-40: Harmful if swallowed. Limited evidence of a carcinogenic effect.



Xn; Sensitising

R42/43: May cause sensitisation by inhalation and skin contact.

R10: Flammable.

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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Additional information:

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

Label elements:

Labelling according to Regulation (EC) No 1272/2008:

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

Hazard pictograms:







GHS02 GHS07 GHS08

Signal word: Danger

Hazard-determining components of labelling:

ethanol

Ni/Co IDA Agarose/Mag Beads

Hazard statements:

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P285 In case of inadequate ventilation wear respiratory protection.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse

skin with water/shower.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

Other hazards:

Results of PBT and vPvB assessment:

PBT: Not applicable. **vPvB:** Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 64-17-5 ethanol EINECS: 200-578-6 FR11

10-<25%

Flam. Lig. 2, H225

Ni/Co IDA Agarose/Mag Beads

1-≤2.5%

Xn R22-40; Xn R42/43 Carc. Cat. 3

& Resp. Sens. 1B, H334; Carc. 2, H351; Acute Tox. 4, H302; Skin

Sens. 1B, H317

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Additional information:

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 into the fresh air. Do not leave affected persons unattended.

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 for a doctor immediately.

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 Firefighting measures

Extinguishing media:

Suitable extinguishing agents:

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

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: Do not inhale explosion gases or combustion gases.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation

Keep away from ignition sources.

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

Wear protective clothing.

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 contaminated material as waste according to item 13.

Ensure adequate ventilation.

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

Handling:

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.



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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.

Fumes can combine with air to form an explosive mixture.

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

Additional information about design of technical facilities: No further data; see item 7.

Control parameters:

Ingredients with limit values that require monitoring at the workplace:

64-17-5 ethanol

WEL Long-term value: 1920 mg/m³, 1000 ppm

Exposure controls:

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.

Protection of hands: Protective gloves

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: Safety glasses

9 Physical and chemical properties

Information on basic physical and chemical properties:

General Information:

Appearance:

Form: Suspension

Colour: According to product specification

Odour: Characteristic
Odour threshold: Not determined.

pH-value at 20 °C: 6.5

Change in condition:

Melting point/Melting range: Undetermined.

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Boiling point/Boiling range: Undetermined. Flash point: $\geq 23 - = < 60 \, ^{\circ}\text{C}$ Flammability (solid, gaseous): Not applicable.

Ignition temperature: 425 °C

Decomposition temperature: Not determined.

Self-igniting: Product is not selfigniting.

Danger of explosion: Product is not explosive. However, formation of explosive air/

vapour mixtures are possible.

Explosion limits:

 Lower:
 3.5 Vol %

 Upper:
 15.0 Vol %

 Vapour pressure at 20 °C:
 59 hPa

Density:Not determined.Relative density:Not determined.Vapour density:Not determined.Evaporation rate:Not determined.

Solubility in / Miscibility with

water: Dispersible.

Partition coefficient (n-octanol/water): Not determined.

Viscosity:

Dynamic: Not determined. Kinematic: Not determined.

Other information:No further relevant information available.

10 Stability and reactivity

Reactivity:

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.

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: Irritant to skin and mucous membranes.

on the eye: Irritating effect.

Sensitization:

Sensitization possible through inhalation. Sensitization possible through skin contact.

Other information (about experimental toxicology):

The toxicological effects have not been tested completely.

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CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):

Carc. 2

12 Ecological information

Toxicity:

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available. **Other information:** The ecological effects have not been tested completely.

Behaviour 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 (German Regulation) (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:

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:

ADR, ADN, IMDG, IATA Void

UN proper shipping name:

ADR, ADN, IMDG, IATA Void

Transport hazard class(es):

ADR, ADN, IMDG, IATA

Class: Void

Packing group:

ADR, IMDG, IATA Void

Environmental hazards:

Marine pollutant: No

Special precautions for user: Not applicable.

Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

UN "Model Regulation": -

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture: No further relevant information available.

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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.

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H351 Suspected of causing cancer.

R11 Highly flammable.

R22 Harmful if swallowed.

R40 Limited evidence of a carcinogenic effect.

R42/43 May cause sensitisation by inhalation and skin contact.

Department issuing MSDS:

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Abbreviations and acronyms:

ADR: Accord européen sur le transport 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 Harmonized 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)

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Resp. Sens. 1B: Sensitisation - Respirat., Hazard Category 1B

Skin Sens. 1B: Sensitisation - Skin, Hazard Category 1B

Carc. 2: Carcinogenicity, Hazard Category 2