

# MATERIAL SAFETY DATA SHEET



## Section 1. Identification

**Product:** Qbeads-Carboxyl

**Catalog-No.:** MF-COO-3000

**Manufacturer:** MagQu Co., Ltd.

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## Section 2. Hazards Identification

### Classification of the substance or mixture

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

The product is not classified according to the CLP regulation.

### Label elements

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

Hazard pictograms: Void

Signal word: Void

Hazard statements: Void

Classification system:

NFPA ratings (scale 0 - 4)

Health = 0

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 0

Fire = 0

Reactivity = 0

OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Not applicable.

Target Organ(s): Not applicable or unknown.

**Other hazards:** This mixture has not been tested to determine the overall health hazard; therefore in accordance with 29CFR1910.1200, the data reported above pertains to the hazardous ingredients of this mixture.

## Section 3. Composition/Information on Ingredients

**Chemical characterization:** Mixtures

**Description:** The magnetic beads consist of Fe<sub>3</sub>O<sub>4</sub> magnetic core and being coated with dextran. The magnetic bead with surface functional group -COOH. The magnetic bead consists of a Fe<sub>3</sub>O<sub>4</sub> core and dextran coating layer.

**CAS number/other identifiers:** Not applicable.

### Components:

Chemical Name	EC-No	CAS-No	Weight %	Classification (Reg.1272/2008)	REACH Registration Number
Sodium azide	247-852-1	26628-22-8	0.09	Acute Tox. 2 (H300) Acute Tox. 1 (H310) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)(EUH032)	No data available

For the full text of the H-Statements mentioned in this Section, see Section 16.

## Section 4. First Aid Measures

**General information:** No special measures required.

**Inhalation:** Remove from exposure to fresh air immediately; consult doctor in case of complaints.

**Skin:** Wash off with soap and plenty of water.

**Eyes:** Flush with large amounts of water for at least 15 minutes. Wash contaminated clothes before reuse. Consult a physician if irritation persists.

**Swallowing:** Flush mouth with water. Get medical attention.

**Most important symptoms and effects, both acute and delayed:** None

**Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

## Section 5. Fire Fighting Measures

**Extinguishing Media:**

Suitable extinguishing agents: Foam, CO<sub>2</sub>, Water, Dry Chemical

**Special hazards arising from the substance or mixture:** None known.

**Advice for firefighters:** No special advice.

**Protective equipment:** No special measures required.

## Section 6. Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:**

Ensure adequate ventilation. See Section 12 for additional information.

**Environmental precautions:** Dilute with plenty of water.

**Methods and material for containment and cleaning up:**

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

**Reference to other sections**

No dangerous substances are released. For disposal see section 13.

## Section 7. Handling and Storage

**Precautions for safe handling:** No special measures required.

**Information about protection against explosions and fires:** The product is not flammable.

**Conditions for safe storage, including any incompatibilities**

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

**Specific end uses:** No further relevant information available.

## Section 8. Exposure Control/Personal Protective Measures

**Control parameters**

**Exposure limits:** National occupational exposure limits.

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Sodium azide 26628-22-8	S* TWA 0.1 mg/m <sup>3</sup> STEL 0.3 mg/m <sup>3</sup>	STEL:0.3 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> Skin	VME: 0.1 mg/m <sup>3</sup> VLCT:0.3 mg/m <sup>3</sup>	S* VLA-EC:0.3 mg/m <sup>3</sup> VLA-ED:0.1 mg/m <sup>3</sup>	MAK:0.2 mg/m <sup>3</sup> Ceiling/Peak:0.4 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup>

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Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Sodium azide 26628-22-8	STEL:0.3 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> Skin	Ceiling: 0.29 mg/m <sup>3</sup> Ceiling: 0.11 ppm	STEL:0.3 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> Skin	STEL:0.3 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> Skin	TWA: 0.1 mg/m <sup>3</sup> Skin
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Sodium azide 26628-22-8	STEL:0.3 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> Skin	STEL: 0.4 mg/m <sup>3</sup> MAK: 0.2 mg/m <sup>3</sup>	NDSch: 0.3 mg/m <sup>3</sup> NDS: 0.1 mg/m <sup>3</sup> Skin	Ceiling:0.3 mg/m <sup>3</sup> Skin	STEL:0.3 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> Skin

**Derived no effect level:** No information available.

**Predicted no effect concentration:** No information available.

## Exposure controls

### Engineering measures

Ensure adequate ventilation, especially in confined areas.

### Personal protective equipment:

General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed.

Eye/face protection: Goggles recommended during refilling.

Breathing equipment: Not required.

Protection of hands:

Protective gloves: 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.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls:** Do not allow material to contaminate ground water system.

## Section 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

#### Appearance:

Form: Liquid

Color: Brown to dark brown

**Odor:** Characteristic

**Odour threshold:** Not determined.

**pH-value at 20°C (68 °F):** 7.0-8.5

**Melting point/freezing point:** 0 °C (32 °F)

**Initial boiling point and boiling range:** 100 °C (212 °F)

**Flash point:** Not applicable.

**Evaporation rate:** Not determined.

**Flammability (solid, gas):** Not applicable.

**Upper/lower flammability or explosive limits:** Not determined.

**Density at 20 °C (68 °F):** 0.998 g/cm<sup>3</sup> (8.328 lbs/gal)

**Vapour pressure:** Not determined.

**Relative density:** Not determined.

**Vapour density:** Not determined.

**Relative density:** Not determined.

**Water solubility:** Partly miscible.

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

**Autoignition temperature:** Product is not selfigniting.

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**Viscosity:**

Dynamic at 20°C (68 °F): 1.0020 cP.

Kinematic at 20°C (68 °F): 1 cSt.

**Solvent content:**

Organic solvents: 0 %

Water: 98 %

Solids content: 2 %

**Explosive properties:** Product does not present an explosion hazard.**Oxidizing properties:** Not determined.**Other safety information**

No further relevant information available.

## Section 10. Stability and Reactivity

**Reactivity:** No information available.**Chemical stability:** Stable**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.

## Section 11. Toxicological Information

**Information on toxicological effects****Acute toxicity:****LD/LC50 values that are relevant for classification:** No data available.**Skin:** No irritant effect.**Eye:** Irritating effect.**Inhalation:** No sensitizing effects known.**Ingestion:** There is no data available for this product.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium azide	27 mg/kg (Rat)	50 mg/kg (Rat) 20 mg/kg (Rabbit)	78 weeks Continuous (Rat)

**Chronic toxicity****Corrosivity:** No information available.**Sensitization:** No information available.**Neurological effects:** No information available.**Reproductive toxicity:** No information available.**Mutagenic effects:** No information available.**Target Organ Effects:** No information available.

## Section 12. Ecological information

**Toxicity:****Ecotoxicity effects:** As supplied, the preparation is not expected to present significant adverse environmental effects.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Sodium azide	Macrocystis pyrifera: 96 h Chronic	0.8: 96 h Oncorhynchus mykiss	Daphnia - Daphnia pulex- Larvae:

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	NOEC 5600 µg/l Marine water Pseudokirchneriella subcapitata: 96 h Acute EC50 0.348 mg/l Fresh water	mg/L LC50 0.7: 96 h Lepomis macrochirus mg/L LC50 5.46: 96 h Pimephales promelas mg/L LC50 flow-through	48 h Acute EC50 4.2 to 6.2 mg/l Fresh water Crustaceans - Gammarus lacustris: 48 h Acute LC50 9000 µg/l Fresh water
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**Persistence and degradability:** Not available.

**Bioaccumulative potential:** Not known.

**Mobility in soil:** No further relevant information available.

**Remark:** Not available.

**General notes:** Generally not hazardous for water.

**Results of PBT and vPvB assessment:**

PBT: Not applicable.

vPvB: Not applicable.

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

## Section 13. Disposal guidelines

Dispose all excess reagents and samples in biohazardous waste. Alternatively excess reagents and samples, as well as empty reagent containers can be autoclaved for at least one hour prior to discarding.

Observe all federal, state and local environmental regulations.

## Section 14. Transport information

**UN-Number:** None

**UN proper shipping name:** None

**Transport hazard class(es):** None

**Packing group:** None

**Environmental hazards:** None

**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":** None

## Section 15. Regulatory information and considerations

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

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

Not determined.

**Chemical safety assessment**

Not determined.

## Section 16. Other

The product is for research use only, not to be used on humans.

Full text of H-Statements referred to under sections 2 and 3

H300 - Fatal if swallowed

H310 - Fatal in contact with skin

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects