

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Revision Date: 7. May. 2024

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

Product identifiers

Product name: **Magnetic Fluid - Carboxyl**

Catalog-No.: MF-COO-0060

Brand: MagQu

REACH No. This product is a mixture. REACH Registration Number see section 3.

CAS-No. This product is a mixture. CAS Number see section 3.

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

Identified uses: Laboratory chemicals, Manufacture of substances, Research use.

Uses Advised Against: None.

Details of the supplier of the safety data sheet

Company: MagQu Co., Ltd.

Address: 3F, No.7 and 12, Ln. 538, Zhongzheng Rd., Xindian Dist., New Taipei City 231, Taiwan.

Rm3, 6F, No.95, Minquan Rd., Xindian Dist, New Taipei City 231, Taiwan.

Tel: +886-2-8667-1897

Fax: +886-2-8667-1809

E-mail: info@magqu.com

Website: www.magqu.com

Emergency telephone number +886-2-8667-1897

For Research Use Only. Not for use in diagnostic procedures.

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

Flammability = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 0

Flammability = 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 bead consists of Fe₃O₄ magnetic sphere core and dextran coating layer. Through chemical modification of dextran, the carboxyl groups (-COOH) are joined to the magnetic beads through a short hydrophilic linker. The product is supplied in phosphate buffered saline pH-7.4 with 0.09 % sodium azide.

CAS number/other identifiers: Not applicable.

Dangerous 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

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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. Firefighting Measures

Extinguishing Media:

Suitable extinguishing agents: Foam, CO₂, Water, Dry Chemical

Special hazards arising from the substance or mixture: Nature of decomposition products not known.

Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Further information: No data available.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment. See Section 8 for more detail.

Environmental precautions: No special environmental precautions required.

Methods and material for containment and cleaning up:

Soak up with inert absorbent material.

Reference to other sections

See section 8 for more information.

Section 7. Handling and Storage

Precautions for safe handling: Use personal protective equipment as 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 Protection

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 ³ STEL: 0.3 mg/m ³	STEL: 0.3 mg/m ³ TWA: 0.1 mg/m ³ Skin	VME: 0.1 mg/m ³ VLCT: 0.3 mg/m ³	S* VLA-EC: 0.3 mg/m ³ VLA-ED: 0.1 mg/m ³	MAK: 0.2 mg/m ³ Ceiling/Peak: 0.4 mg/m ³ TWA: 0.2 mg/m ³
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Sodium azide 26628-22-8	STEL: 0.3 mg/m ³ TWA: 0.1 mg/m ³ Skin	Ceiling: 0.29 mg/m ³ Ceiling: 0.11 ppm	STEL: 0.3 mg/m ³ TWA: 0.1 mg/m ³ Skin	STEL: 0.3 mg/m ³ TWA: 0.1 mg/m ³ Skin	TWA: 0.1 mg/m ³ Skin
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Sodium azide 26628-22-8	STEL: 0.3 mg/m ³ TWA: 0.1 mg/m ³ Skin	STEL: 0.4 mg/m ³ MAK: 0.2 mg/m ³	NDSch: 0.3 mg/m ³ NDS: 0.1 mg/m ³ Skin	Ceiling: 0.3 mg/m ³ Skin	STEL: 0.3 mg/m ³ TWA: 0.1 mg/m ³ 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.

Skin and Body Protection: Wear suitable protective clothing.

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

Environmental exposure controls: No special environmental precautions required.

Section 9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance:

Form: Liquid

Color: Brown to dark brown

Odor: No information available.

Odour threshold: No information available.

pH-value at 20°C (68 °F): 6.0 - 8.0

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Melting point/freezing point: 0 °C (32 °F)
Initial boiling point and boiling range: 100 °C (212 °F)
Flash point: °C(°F) Mixture has not been tested.
Evaporation rate: No information available.
Flammability (solid, gas): Not applicable.
Upper/lower flammability or explosive limits: No information available.
Density at 20 °C (68 °F): 0.998 g/cm³ (8.328 lbs/gal)
Vapour pressure: No information available.
Relative density: No information available.
Vapour density: No information available.
Relative density: No information available.
Water solubility: Partly miscible at 20 °C.
Partition coefficient (n-octanol/Water): No information available.
Autoignition temperature: No information available.

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: No information available.

Other safety information

No further relevant information available.

Section 10. Stability and Reactivity

Reactivity: No information available.

Chemical stability: Stable under normal conditions.

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

There is no evidence available indicating acute toxicity.

Principal Routes of Exposure

Acute toxicity:

LD/LC50 values that are relevant for classification: Conclusive but not sufficient for classification.

Skin corrosion/irritation: Conclusive but not sufficient for classification.

Serious eye damage/eye irritation: Conclusive but not sufficient for classification.

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: Conclusive but not sufficient for classification.

Sensitization: Conclusive but not sufficient for classification.

Neurological effects: No information available.

Reproductive toxicity: Conclusive but not sufficient for classification.

Mutagenic effects: Conclusive but not sufficient for classification

Target Organ Effects: No information available.

Section 12. Ecological information

Toxicity:

Ecotoxicity effects:

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Sodium azide	Macrocystis pyrifera: 96 h Chronic NOEC 5600 µg/l Marine water Pseudokirchneriella subcapitata: 96 h Acute EC50 0.348 mg/l Fresh water	0.8: 96 h Oncorhynchus mykiss mg/L LC50 0.7: 96 h Lepomis macrochirus mg/L LC50 5.46: 96 h Pimephales promelas mg/L LC50 flow-through	Daphnia - Daphnia pulex- Larvae: 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

Persistence and degradability: Not available.

Bioaccumulative potential: Not known.

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Mobility in soil: No further relevant information available.

Remark: No information available.

General notes: No information available.

Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects: No further relevant information available.

Section 13. Disposal considerations

Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

Section 14. Transport information

UN number

ADR/RID: - IMDG: - IATA: -

UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

Packaging group

ADR/RID: - IMDG: - IATA: -

Environmental hazards

ADR/RID: no IMDG Marine Pollutant: no IATA: no

Special precautions for user

Not Applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not Applicable.

Section 15. Regulatory information

Chemical Name	US TSCA
Sodium azide 26628-22-8 (0.09)	Listed

US Federal Regulations

SARA 313

This product contains the following toxic chemical(s) subject to the notification requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986. This law requires certain manufacturers to report on annual emissions of specified chemicals and chemical categories. Please note that if you repackage, or otherwise redistribute, this product to industrial customers, a notice similar to this one should be sent to those customers:

Chemical Name	CAS-No	Weight %
Sodium azide	26628-22-8	0.09

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

Section 16. Other information

The product is for research use only. Not for use in diagnostic procedures.

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

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.