MBL A JSR Life Sciences Company

Anti-His-tag mAb-Magnetic Beads

Issue date: 11/Dec/2023

Safety Data Sheet

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

1.1 Product identifier:

Product name: Anti-His-tag mAb-Magnetic Beads

SDS NO：D291_11_E-1

Product code:D291-11

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

Relevant identified uses of the product: Research and Development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Medical & Biological Laboratories (MBL) Co., Ltd.

Address: 1018-1 Terasawaoka, Ina-shi, Nagano-ken 396-0002, Japan

Division: SDS Support

Telephone number: +81-265-76-1777

e-mail address: sds-support@mbl.co.jp

1.4 Emergency telephone number: +81-265-76-1777 (Monday to Friday, 9 AM to 5 PM JST)

Section 2. Hazards identification

GHS classification and label elements of the product

2.1 Classification of the substance or mixture

Classification according to Hazard Communication Standard - 2012 (29 CFR 1910.1200)

Not classified/Classification not possible

2.2 Label elements

Labelling according to Hazard Communication Standard - 2012 (29 CFR 1910.1200)

No GHS label element

No Signal word

2.3 Other hazards

The product does not contain any ingredient designated as PBT and/or vPvB.

The product does not contain any ingredients designated as Endocrine disrupting properties.

Section 3. Composition/information on ingredients

Mixture/Substance selection:

3.2 Mixture

Ingredient name	Content (%)	CAS No.	ECNO	Classification according to REGULATION (EC) No.1272/2008 [CLP]
Albumin, Bovine	0.10	9048-46-8	232-936-2	-
Sodium azide	0.09	26628-22-8	247-852-1	Acute Tox. 2 *, H300; Aquatic Acute 1, H400; Aquatic Chronic 1, H410;EUH032
Water	99.00<	7732-18-5	231-791-2	-
Sodium chloride	0.01	7647-14-5	231-598-3	-
sodium hydrogen phosphate	<0.01	7558-79-4	231-448-7	-
potassium chloride	<0.01	7447-40-7	231-211-8	-
potassium Phosphate Monobasic	<0.01	7778-77-0	231-913-4	-

Section 4. First-aid measures

4.1 Descriptions of first-aid measures

General measures

P314-Get medical advice/attention if you feel unwell.

IF INHALED

P304 + P312-Call a POISON CENTER/doctor/physician if you feel unwell.

IF ON SKIN (or hair)

P302 + P352-Wash with plenty of soap and water.

IF IN EYES

P305 + P351 + P338-Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF SWALLOWED

P301 + P312-Call a POISON CENTER/doctor/physician if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Specific information on symptom and effect are unknown.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Section 5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

5.2 Specific hazards arising from the substance or mixture

Specific hazards arising from the substance or mixture is not available.

5.3 Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

P280A-Wear protective gloves/protective clothing/eye protection/face protection.

Section 6. Accidental release measures

6.1 Personnel precautions, protective equipment and emergency procedures

Stop leak if safe to do so.

6.2 Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

6.3 Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

Preventive measures for secondary accident

P376-Stop leak if safe to do so.

Stop leak if you can do it without risk.

Prevent entry into waterways, sewers, basements or confined areas.

6.4 Reference to other sections

Refer to section 13

Section 7. Handling and storage

7.1 Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)
P260-Do not breathe dust/fume/gas/mist/vapors/spray.
Safety Measures
P280A-Wear protective gloves/protective clothing/eye protection/face protection.
Advice on general occupational hygiene
P264-Wash contaminated parts thoroughly after handling.
P270-Do not eat, drink or smoke when using this product.

7.2 Storage
Conditions for safe storage
P233-Keep container tightly closed.
P235 + P410-Keep cool. Protect from sunlight.
Container and packaging materials for safe handling data is not available.

7.3 Specific end use(s)
For the relevant identified use(s)listed in Section 1 the advice mentioned in this section 7 is to be observed.

Section 8. Exposure controls/personal protection

8.1 Control parameters
Adopted value
(Sodium azide)
ACGIH(1996) STEL: C (as Sodium azide) 0.29mg/m3; (as Hydrazoic acid vapor) 0.11ppm (Card impair; lung dam)
EU Occupational exposure limit values (Workplace Exposure limits) compliant to relevant EU Directive through 91/332/EEC to 2019/1831/EU
(Sodium azide)
LTEL: 0.1mg/m3
STEL: 0.3mg/m3 (SKIN)
OSHA-PEL value is not available.

8.2 Exposure controls
Appropriate engineering controls
Do not use in areas without adequate ventilation.
Washing facilities should be available.
Individual protection measures
Hand protection
Wear protective gloves.
Eye protection
Wear eye/face protection.
Skin and body protection
Wear protective clothing.

Section 9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties
Physical state: Liquid
Color: Dark brown
Odor data is not available.
Melting point/Freezing point data is not available.
Boiling point or initial boiling point data is not available.
Boiling range data is not available.
Flammability (gases, liquids and solids) data is not available.
Lower and upper explosion limit/flammability limit data is not available.
Flash point data is not available.
Auto-ignition temperature data is not available.

Decomposition temperature data is not available.
pH: No information
Kinematic viscosity data is not available.
Solubility:
Solubility in water data is not available.
n-Octanol/water partition coefficient data is not available.
Vapor pressure data is not available.
Density and/or relative density data is not available.
Relative vapor density (Air=1) data is not available.
Particle characteristics data is not available.

9.2 Other information

Other information is not available.

Section 10. Stability and Reactivity

10.1 Reactivity

Reactivity data is not available.

10.2 Chemical stability

Stable under normal storage/handling conditions.

10.3 Possibility of hazardous reactions

Possibility of hazardous reactions data is not available.

10.4 Conditions to avoid

Conditions to avoid data is not available.

10.5 Incompatible materials

Incompatible materials data is not available.

10.6 Hazardous decomposition products

Hazardous decomposition products data is not available.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[Table 3 of Annex VI to the CLP Regulations]
(Sodium azide)
Category 2

Irritant properties

Skin corrosion/irritation data is not available.
Serious eye damage/irritation data is not available.

Allergenic and sensitizing effects data is not available.
Mutagenic effects data is not available.
Carcinogenicity

[ACGIH]
(Sodium azide)
A4(1996) : Not Classifiable as a Human Carcinogen

Teratogenic effects data is not available.
Reproductive toxicity data is not available.
Specific target organ toxicity (STOT)

STOT-single exposure data is not available.
STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

11.2 Information on other hazards

Endocrine disrupting properties is not available.

Section 12. Ecological Information

12.1 Toxicity

Aquatic toxicity

Hazardous to the aquatic environment, short-term (acute)

[Table 3 of Annex VI to the CLP Regulations]

(Sodium azide)

Category 1

Hazardous to the aquatic environment, long-term (chronic)

[Table 3 of Annex VI to the CLP Regulations]

(Sodium azide)

Category 1

Water solubility

(Sodium azide)

good (41.7 g/100 ml, 17℃) (ICSC, 2014)

(sodium hydrogen phosphate)

7.7 g/100 ml (20℃) (ICSC, 2006)

(potassium chloride)

good (ICSC, 2003)

(potassium Phosphate Monobasic)

22 g/100 ml (ICSC, 2005)

12.2 Persistence and degradability

(Sodium azide)

Degradation measured by HPLC : 1% (METI existing chemical safety inspections)

12.3 Bioaccumulative potential

(Sodium azide)

log Pow <= 0.3 (Check & Review, Japan)

(sodium hydrogen phosphate)

log Pow=-5.8 (ICSC, 2006)

(potassium chloride)

log Kow=0.15 (PHYSPROP DB, 2005)

12.4 Mobility in soil

Mobility in soil data is not available.

12.5 Results of PBT and vPvB assessment

PBT and/or vPvB assessment data is not available.

12.6 Endocrine disrupting properties

Endocrine disrupting properties is not available.

12.7 Other adverse effects

Ozone depleting chemical data is not available.

Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

13.1 Waste treatment methods

P273-Avoid release to the environment.

P501-Dispose of contents/container in accordance with local/national regulation.

Contaminated packing

Dispose of container after using the contents completely.

Section 14. Transport Information

UN No., UN CLASS

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

ADR (European Agreement concerning the International Carriage of Dangerous Goods by Road)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

ADN (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

RID (Regulation concerning the International Carriage of Dangerous goods by Rail)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

IMDG Code (International Maritime Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

IATA (Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

14.5 Environmental hazards

Marine pollutants (yes/no) : no

14.6 Special precautions for user

Special precautions for user is not applicable.

14.7 Maritime transport in bulk according to IMO instruments

MARPOL Annex II – Noxious Liquid Substances

Noxious Liquid Substances ; Cat. Z equiv.

Sodium chloride

Non Noxious Liquid Substances ; Cat. OS

potassium chloride; Water

MARPOL Annex V – HME (Harmful to the Marine Environment)

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

Section 15. Regulatory Information

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

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

Water; potassium chloride; sodium hydrogen phosphate; Sodium chloride; potassium Phosphate Monobasic; Albumin, Bovine; Sodium azide

Superfund Amendments and Reauthorizations Act (SARA), Title III

This product contains no chemicals subjected to reporting levels established by SARA Title III, Section 313.

California proposition 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

Section 16. Other information

GHS classification and labelling

Not classified/Classification not possible

Full text of Hazard categories and Hazard statements referred to only section 3

Acute Tox. 2, H300 - Acute toxicity, Category 2: H300 Fatal if swallowed

Aquatic Acute 1, H400 - Hazardous to the aquatic environment, short-term (acute), Category 1: H400 Very toxic to aquatic life

Aquatic Chronic 1, H410 - Hazardous to the aquatic environment, long-term (chronic), Category 1: H410 Very toxic to aquatic life with long lasting effects

EUH032 - Contact with acids liberates very toxic gas.

References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 22nd edit., 2021 UN

IMDG Code, 2020 Edition (Incorporating Amendment 40-20)

IATA Dangerous Goods Regulations (64th Edition) 2023

2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2023 TLVs and BEIs. (ACGIH)

Supplier's data/information

Hazard Communication Standard - 2012 (29 CFR 1910.1200)

Chemicals safety data management system "GHS Assistant" Version 4.25 (https://www.asahi-ghs.com/)

Abbreviations and acronyms

C - Ceiling limit; card - cardiac; dam - damage; impair - impairment

Revision information

First edition

General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.