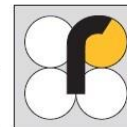


SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006
Version 01 Revision date: 31-10-2022
Print date: 31-10-2022



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

1.1. Product identifier

Product name DNSH conjugate
Product code 5091DNSHCO

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

Identified uses Laboratory use

1.3. Details of the supplier of the safety data sheet

Company R-Biopharm Nederland B.V.
Beijerinckweg 18
6827 BN Arnhem
Netherlands
Telephone +31 (0)26-363-0364
Fax +31 (0)26-364-5111
E-mail address info@r-biopharm.nl

1.4. Emergency telephone number

Emergency phone # Please look for the emergency telephone number in your country before using this substance or mixture.

2. Hazards identification

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No 1272/2008)

Repr. 1B, H360FD

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

2.2. Label elements

Labelling (Regulation (EC) No 1272/2008)

Pictogram



GHS08

Signal word Danger

Hazard statement(s)

H360FD May damage fertility. May damage the unborn child.

Precautionary statements

P201 Obtain special instructions before use.

P308 + P313 IF exposed or concerned: Get medical advice/attention.


Supplemental Hazard Statements None

2.3. Other hazards

None

3. Composition/information on ingredients

3.1. Dangerous ingredients

| Chemical name | EC-No | CAS-No | Weight (%) | Classification (1272/2008/EC) |  |
|---------------|-----------|------------|------------|----------------------------------|---|
| Boric acid | 233-139-2 | 10043-35-3 | 0.3 - 0.4 | Repr. 1B H360FD | |

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

For more detailed information on health effects and symptoms, see Section 11.

4. First aid measures

4.1. Description of first aid measures

| | |
|-----------------------|---|
| General advice | First aider needs to protect himself. Consult a physician. Show this safety data sheet to the doctor in attendance. |
| Eye contact | Rinse out with plenty of water. Immediately call in ophthalmologist. |
| Skin contact | Wash off with plenty of water. Remove contaminated clothing. If available swab with polyethylene glycol 400. Call a physician immediately. |
| Ingestion | Rinse mouth with water. Do NOT induce vomiting. If conscious, give 2 glasses of water. Do not attempt to neutralize. Get immediate medical attention. |
| Inhalation | Move person into fresh air. If not breathing, give artificial respiration. Immediately call in a physician. |

4.2. Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

4.3. Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|------------------------|
| Notes to physician | Treat symptomatically. |
|---------------------------|------------------------|

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Use water, CO₂, dry chemical or foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which must not be used for safety reasons

None known based on information supplied.

5.2. Special hazards arising from the substance or mixture

Not combustible. Ambient fire may liberate hazardous vapours. Fire may cause evolution of Sulphur oxides.

5.3. Advise for firefighters

Wear self-contained breathing apparatus and protective suit

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid substance contact. Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent and neutralizing material (e.g. sand, silica gel, acid-binder, universal binder, sawdust). Dispose of properly. Clean up affected area.

6.4. 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

7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.

For precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Store at 2°C to 8°C (36°F to 46°F).

7.3. Specific end uses

No data available.

8. Exposure controls/personal protection

8.1. Control parameters

| Chemical name | Type | Value* |
|-----------------------------|---------|---------------------|
| Boric acid (CAS 10043-35-3) | TWA 8hr | 2 mg/m ³ |
| | STEL | 6 mg/m ³ |

*(External MSDS)

8.2. Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Tightly fitting safety glasses

Skin/body protection

Acid resistant protective clothing

Hand protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the related standard EN374.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the substance/ the preparation/ the chemical mixture.

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

Material:

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 cannot be calculated in advance and has to be checked prior to the application.

Penetration time:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Respiratory protection

Required when vapours/aerosols are generated.

Recommended filter type: Filter P 2 (acc. to DIN 3181) for solid and liquid particles of harmful substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Hygiene measures

Immediately change contaminated clothing and immerse in water. Apply preventive skin protection. Wash hands after working with substance. Do not inhale substance.

Environmental Exposure controls

Do not let product enter drains.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|------------------------------|
| Appearance | Form: liquid |
| Color | Slightly green |
| Odor | Odorless |
| Odor threshold | no data available |
| pH | 6.0 ± 0.05 |
| Melting point/ freezing point | no data available |
| Initial boiling point/ boiling range | no data available |
| Flash point | not applicable |
| Evaporation rate | no data available |
| Flammability (solid, gas) | not applicable |
| Flammability limits in air | no data available |
| Vapor pressure | no data available |
| Relative density | no data available |
| Water solubility | Fully miscible |
| Partition coefficient: n-octanol/water | no data available |
| Autoignition temperature | Product is not self-igniting |
| Decomposition temperature | no data available |
| Viscosity | no data available |

Explosive properties

Product does not contain an explosion hazard

Oxidizing properties

no data available

9.2. Other safety information

No data available.

10. Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

In the event of fire: See chapter 5.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

| Chemical name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------|-------------------|--------------------|-------------------|
| Boric acid | 2660 mg/kg (Rat)* | >2000 mg/kg (Rat)* | >2.03 mg/l (Rat)* |

*(External MSDS)

Skin corrosion/irritation

No data available.

Serious eye damage/irritation

No data available.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

Contains no ingredient listed as a carcinogen

Reproductive toxicity

No data available.

Specific target organ toxicity – single exposure

No data available.

Specific target organ toxicity – repeated exposure

No data available.

Aspiration hazard

No data available.

12. Ecological information

12.1. Toxicity

| Chemical name | Toxicity to algae | Toxicity to fish | Toxicity to microorganisms | Toxicity to daphnia and other aquatic invertebrates |
|---------------|-------------------|--|----------------------------|---|
| Boric acid | - | 96h LC50 Oncorhynchus mykiss: 50-100 mg/l* | - | 48h EC50 Daphnia magna 133 mg/l* |

*(External MSDS)

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products

Dispose of as hazardous waste in compliance with local and national regulations.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

14.1. UN/ID No

ADR/RID: -

IMDG: -

IATA: -

14.2. UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3. Transport hazard class

ADR/RID: -

IMDG: -

IATA: -

14.4. Packaging group

ADR/RID: -

IMDG: -

IATA: -

14.5. Environmental hazards

ADR/RID: -

IMDG Marine pollutant: -

IATA: -

14.6. Special precautions for user

No data available.

15. Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

No information available.

15.2. Chemical safety assessment

No information available.

16. Other information

Full text of H-statements referred to under Sections 2 and 3

H360FD – May damage fertility. May damage the unborn child.

Revision note: x

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
