



Catalogue code/number: D-MDH-200, D-MDH-1000, D-MDH-Bulk

Product name: D-Malate Dehydrogenase

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1. PRODUCT IDENTIFIERS

Product Code: D-MDH-200, D-MDH -1000, D-MDH -Bulk

Product Name: D-Malate Dehydrogenase (E.C. 1.1.1.83)

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Use of the products: laboratory chemicals, manufacture of substances.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company identification (legal and production site)	CPC BIOTECH s.r.l. Via L. Galvani, 1 20875 Burago di Molgora (MB), Italy
Company identification (production site)	CPC BIOTECH s.r.l. Via L. Galvani, 1 20875 Burago di Molgora (MB), Italy
Telephone number	0039-039-6898029
Fax number	0039-039-6898029
E-mail	info@cpcbiotech.it
Responsible person of the MSDS	Safety department ACS Dobfar

1.4 EMERGENCY TELEPHONE NUMBER

Poison Control Center (Cav)-
Piazza Ospedale Maggiore, 3
- 20162 Milano (Italy)
cav@ospedaleniguarda.it

Emergency Telephone: +39 02 6610 1029

2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Not a hazardous product according to Regulation n.1272/2008.

2.2 LABEL ELEMENTS

Not applicable. Mixture classified as not hazardous according to Regulation n.1272/2008.

2.3 OTHER HAZARDS

Not known.

3. COMPOSITION/INFORMATION ON THE INGREDIENTS

3.1 SUBSTANCES

Synonyms: (R)-malate: NAD⁺ oxidoreductase (decarboxylating) (E.C. 1.1.1.83)

CAS Number: N.A.

EC Number: 1.1.1.83



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4. FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

Recommended to wear personal protective equipment for first aid.

In case of inhalation	Provide fresh air
In case of skin contact	Wash with soap and water
In case of eye contact	Wash out eyes with plenty of water
In case of ingestion	Wash out mouth with water. Give to the victim 1 or 3 glasses of water in order to dilute stomach content

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

No additional information available.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

No additional information available.

5. FIREFIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

The product is not combustible. Use extinguishing systems compatible with the local situation and with the surrounding environment.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Nature of decomposition products not known.

5.3 ADVICE FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

For non-emergency personnel	Wear suitable protective equipment. Don't breathe the vapors, evacuate the danger area.
For emergency responders	Use protective devices. See section 8.

6.2 ENVIRONMENTAL PRECAUTIONS

Prevent entry to sewers and public waters.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Sweep up and dispose properly.

6.4 REFERENCE TO OTHER SECTIONS

For individual protection, refer to section 8. For information about waste, refer to section 13



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7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Ensure good ventilation of the workstation where dust is formed. Handle in accordance with good industrial hygiene and safety procedures.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. The correct storage refers to intact product in its tightly closed package.
Recommended storage temperature: +2/+8 °C

7.3 SPECIFIC END USE(S)

No additional information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

No additional information available.

8.2 EXPOSURE CONTROLS

Appropriate engineering controls	Wear protective clothing. See section 7.1.
Individual protection measures, such as personal protective equipment	Personal protective equipment must be chosen in accordance with cen standards and with the supplier of personal protective equipment.
Eye protection	Wear compliant safety glasses.
Skin protection	Wear protective gloves. Wear disposable coveralls.
Respiratory protection	Wear disposable mask.
Thermal hazards	Not applicable
Environmental exposure controls	Do not let the product flow into the drains.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White liquid suspension material
Odour	Not available
Odour threshold	Not available
pH	8.0
Melting point/freezing point	Not available
Boiling point	Not available
Flash point	Not available
Evaporation rate	Not available
Flammability	Not available



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Vapour pressure	Not available
Vapour density	Not available
Relative density	Not available
Solubility	Not available
Partition coefficient	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available

9.2 OTHER SAFETY INFORMATION

No additional information available.

10. STABILITY AND REACTIVITY

10.1 REACTIVITY

No data available.

10.2 CHEMICAL STABILITY

The product is stable if store in adequate conditions (see section 7.2).

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No data available.

10.4 CONDITIONS TO AVOID

The product is stable if store in adequate conditions (see section 7.2).

10.5 INCOMPATIBLE MATERIALS

Strong oxidizing agents.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

In case of fire see section 5.

11. TOXOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

Acute toxicity	The product doesn't represent acute toxicity in base of known information.
Skin corrosion/irritation	Not identified.
Respiratory or skin sensitisation	Not identified.
Germ cell mutagenicity	Not identified.
carcinogenicity	Not identified.
Reproductive toxicity	Not identified.
STOT-single exposure	Not identified.



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STOT-repeated exposure
Aspiration hazard

Not identified.
Not identified.

12. ECOLOGICAL INFORMATION

12.1 TOXICITY

No data available.

12.2 PERSISTENCE AND DEGRADABILITY

No data available.

12.3 BIOACCUMULATION 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 CONSIDERATION

13.1 WASTE TREATMENT METHODS

Do not disperse the product in the environment.

Dispose in a safe manner in accordance with local/national regulations.

14. TRANSPORT INFORMATION

14.1 UN NUMBER

Not applicable.

14.2 UN PROPER SHIPPING NAME

Not applicable.

14.3 TRANSPORT HAZARD CLASS(ES)

Not applicable.

14.4 PACKAGING GROUP

Not applicable.

14.5 ENVIRONMENTAL HAZARDS

ADR
RID

Not dangerous goods according to the current regulation.
Not dangerous goods according to the current regulation.



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ADN	Not relevant.
IATA	Not dangerous goods according to the current regulation.
IMDG	Not dangerous goods according to the current regulation.

14.6 SPECIAL PRECAUTIONS FOR USER

Not dangerous goods according to the current regulation.

14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL AND THE IBC CODE

No data available.

15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

This safety data sheet is in compliant to the Regulation UE 2020/878.

15.2 CHEMICAL SAFETY ASSESSMENT

Chemical safety assessment is not required for this product.

16. OTHER INFORMATION

Revision information	New revision, it replaces the previous ones. Revision carried out for alignment with the regulation.
List of abbreviation	Not available.
References	Listed in the appropriate paragraphs.
Full text of any H phrases not mentioned in full in sections 2 to 5	Not available.



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Disclaimer

The information in this safety data sheet is correct according to our best knowledge of the product at the time of publication. However, all statements, recommendations or suggestions are indicated without any implicit or explicit guarantee or assurance on our part. This information is provided for the sole purpose of allowing the most correct and safe use, storage, transport and disposal of the preparation.

This information should not be considered a guarantee or a specification of the quality of the preparation.

They refer only to the material specifically indicated and are not valid for the same when used in combination with other materials or in other processes not specifically indicated in the text of the safety data sheet.

As a technician, the user should verify the suitability of this information for the specific use of the product and adopt the appropriate safety information