

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

# **1.1 PRODUCT IDENTIFIERS**

Product Code: D-LDH-20, D-LDH-100, D-LDH-Bulk Product Name: D-Lactate Dehydrogenase (EC: 1.1.1.28)

**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)

Company identification (production site)

Telephone number Fax number E-mail Responsible person of the MSDS CPC BIOTECH s.r.l. Via L. Galvani, 1 20875 Burago di Molgora (MB), Italy CPC BIOTECH s.r.l. Via L. Galvani, 1 20875 Burago di Molgora (MB), Italy 0039-039-6898029 0039-039-6898029 info@cpcbiotech.it

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: D-(-)-lactate dehydrogenase (NAD+), D-lactic acid dehydrogenase (EC: 1.1.1.28) CAS Number: 9028-36-8



EC Number: N.A.

# 4. FIRST AID MEASURES

# **4.1 DESCRIPTION OF FIRST AID MEASURES**

Recommended to wear personal protective equipment for first aid.

In case of inhaltation	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 mounth 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.

# 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
Individual protection
measures, such as personal
protective equipment
Eye protection
Skin protection
Respiratory protection
Thermal hazards
Environmental exposure
controls

Wear protective clothing. See section 7.1.

Personal protective equipment must be chosen in accordance with cen standards and with the supplier of personal protective equipment. Wear compliant safety glasses. Wear protective gloves. Wear disposable coveralls. Wear disposable mask. Not applicable

Do not let the product flow into the drains.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance Odour Odour threshold pH Melting point/freezing point Boiling point Flash point Evaporation rate White liquid suspension material Not available 7.0 Not available Not available Not available Not available Not available Not available



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

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

Not identified. Not identified. Not identified. Not identified.



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

Not dangerous goods according to the current regulation.

RID

Not dangerous goods according to the current regulation.



ADN	Not relevant.
ΙΑΤΑ	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.



## 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