



# Formate dehydrogenase (Candida boidinii)

## Safety Data Sheet

according to Regulation (EU) 2015/830

Issue date: 04/02/2014 Revision date: 02/03/2022 Supersedes version of: 26/01/2018 Version: 1.3

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Mixture  
Product name : Formate dehydrogenase (Candida boidinii)  
Product code : E-FDHCB

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

#### 1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only  
Use of the substance/mixture : Use as laboratory reagent

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

#### Manufacturer

Megazyme  
Bray Business Park  
A98 YV29 Bray - Ireland  
T +353 12861220 - F +353 12861264  
[cs@megazyme.com](mailto:cs@megazyme.com) - [www.megazyme.com](http://www.megazyme.com)

### 1.4. Emergency telephone number

Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday]

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

#### Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

Labelling according to: exemption for inner packaging where the contents do not exceed 10ml

No labelling required

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH Annex II

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### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

|                                       |                                                                  |
|---------------------------------------|------------------------------------------------------------------|
| First-aid measures after inhalation   | : Remove person to fresh air and keep comfortable for breathing. |
| First-aid measures after skin contact | : Wash skin with plenty of water.                                |
| First-aid measures after eye contact  | : Rinse eyes with water as a precaution.                         |
| First-aid measures after ingestion    | : Call a poison center or a doctor if you feel unwell.           |

#### 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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

|                              |                                                  |
|------------------------------|--------------------------------------------------|
| Suitable extinguishing media | : Water spray. Dry powder. Foam. Carbon dioxide. |
|------------------------------|--------------------------------------------------|

#### 5.2. Special hazards arising from the substance or mixture

|                                                  |                                |
|--------------------------------------------------|--------------------------------|
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |
|--------------------------------------------------|--------------------------------|

#### 5.3. Advice for firefighters

|                                |                                                                                                                                          |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

|                      |                            |
|----------------------|----------------------------|
| Emergency procedures | : Ventilate spillage area. |
|----------------------|----------------------------|

##### 6.1.2. For emergency responders

|                      |                                                                                                                                                             |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

|                         |                                                                 |
|-------------------------|-----------------------------------------------------------------|
| Methods for cleaning up | : Take up liquid spill into absorbent material.                 |
| Other information       | : Dispose of materials or solid residues at an authorized site. |

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

|                               |                                                                                                     |
|-------------------------------|-----------------------------------------------------------------------------------------------------|
| Precautions for safe handling | : Ensure good ventilation of the work station. Wear personal protective equipment.                  |
| Hygiene measures              | : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |

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### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

| <b>Hand protection:</b> |                      |                  |                |             |          |
|-------------------------|----------------------|------------------|----------------|-------------|----------|
| Protective gloves       |                      |                  |                |             |          |
| Type                    | Material             | Permeation       | Thickness (mm) | Penetration | Standard |
| Disposable gloves       | Nitrile rubber (NBR) | 3 (> 60 minutes) |                | 2 (< 1.5)   | EN 374-2 |

| <b>Eye protection:</b> |         |                   |          |
|------------------------|---------|-------------------|----------|
| Safety glasses         |         |                   |          |
| Type                   | Use     | Characteristics   | Standard |
| Safety glasses         | Droplet | With side shields | EN 166   |

| <b>Skin and body protection:</b>  |          |
|-----------------------------------|----------|
| Wear suitable protective clothing |          |
| Type                              | Standard |
| Lab coat                          |          |

| <b>Respiratory protection:</b>                                           |             |                                 |                |
|--------------------------------------------------------------------------|-------------|---------------------------------|----------------|
| In case of insufficient ventilation, wear suitable respiratory equipment |             |                                 |                |
| Device                                                                   | Filter type | Condition                       | Standard       |
| Dust mask                                                                | Type P1     | Protection for Liquid particles | EN 143, EN 149 |

#### Personal protective equipment symbol(s):



#### Environmental exposure controls:

Avoid release to the environment.

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### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

|                                                 |                     |
|-------------------------------------------------|---------------------|
| Physical state                                  | : Liquid            |
| Colour                                          | : white.            |
| Odour                                           | : None.             |
| Odour threshold                                 | : No data available |
| pH                                              | : No data available |
| Relative evaporation rate (butylacetate=1)      | : No data available |
| Melting point                                   | : Not applicable    |
| Freezing point                                  | : No data available |
| Boiling point                                   | : No data available |
| Flash point                                     | : No data available |
| Auto-ignition temperature                       | : No data available |
| Decomposition temperature                       | : No data available |
| Flammability (solid, gas)                       | : Not applicable    |
| Vapour pressure                                 | : No data available |
| Relative vapour density at 20 °C                | : No data available |
| Relative density                                | : No data available |
| Solubility                                      | : Soluble in water. |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Viscosity, kinematic                            | : No data available |
| Viscosity, dynamic                              | : No data available |
| Explosive properties                            | : No data available |
| Oxidising properties                            | : No data available |
| Explosive limits                                | : No data available |

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

|                             |                  |
|-----------------------------|------------------|
| Acute toxicity (oral)       | : Not classified |
| Acute toxicity (dermal)     | : Not classified |
| Acute toxicity (inhalation) | : Not classified |

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Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Not classified  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.  
Hazardous to the aquatic environment, short-term (acute) : Not classified  
Hazardous to the aquatic environment, long-term (chronic) : Not classified

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

| ADR                                  | IATA           |
|--------------------------------------|----------------|
| <b>14.1. UN number</b>               |                |
| Not applicable                       | Not applicable |
| <b>14.2. UN proper shipping name</b> |                |
| Not applicable                       | Not applicable |

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### 14.3. Transport hazard class(es)

Not applicable

Not applicable

### 14.4. Packing group

Not applicable

Not applicable

### 14.5. Environmental hazards

Not applicable

Not applicable

No supplementary information available

### 14.6. Special precautions for user

#### Overland transport

Not applicable

#### Air transport

Not applicable

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

No additional information available

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.