

**L-Histidine**  
Safety Data Sheet

according to Regulation (EU) 2015/830  
Date of issue: 06/12/2011 Revision date 22/01/2018

**H0710**  
Version: 2.0

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

**1.1. Product identifier**

Product form : Substance  
Trade name : L-Histidine  
EC-No. : 200-745-3  
CAS-No. : 71-00-1  
REACH registration No : 01-2120750286-53-0000  
Product code : H0710  
Formula : C6H9N3O2  
Synonyms : (S)-2-Amino-3-(4-imidazolyl)propionic acid  
L-3-Imidazol-4-yl-alanine.  
Product group : Raw material

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

**1.2.1. Relevant identified uses**

Main use category : Professional use  
Industrial/Professional use spec : For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

**1.2.2. Uses advised against**

No additional information available

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

**Supplier**

Duchefa Biochemie B.V.  
A. Hofmanweg 71  
2031 BH Haarlem - The Netherlands  
T +31(0)23-5319093 - F +31(0)23-5318027  
[info@duchefa.nl](mailto:info@duchefa.nl)

**1.4. Emergency telephone number**

Emergency number : Supplier contact information:  
+31(0)23-5319093 (M-F 09:00-17:00)  
+31(0)6-30109355 (outside office hours)

| Organisation/Company                                        | Address                                                                             | Comment                                   |
|-------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------|
| World Health Organization world directory of poison centres | <a href="http://apps.who.int/poisoncentres/">http://apps.who.int/poisoncentres/</a> | Consult website for a local poison centre |

**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**

No additional information available

## 2.2. Label elements

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

No labelling applicable

## 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name : L-Histidine  
CAS-No. : 71-00-1  
EC-No. : 200-745-3

| Name        | Product identifier                      | %    |
|-------------|-----------------------------------------|------|
| L-Histidine | (CAS-No.) 71-00-1<br>(EC-No.) 200-745-3 | > 99 |

Full text of H-statements: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Seek medical attention if ill effect develops.  
First-aid measures after inhalation : Move to fresh air.  
First-aid measures after skin contact : Wash skin with mild soap and water.  
First-aid measures after eye contact : Rinse with water.  
First-aid measures after ingestion : Rinse mouth out with water.

### 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

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Alcohol resistant foam.  
Dry chemical powder.  
Carbon dioxide (CO<sub>2</sub>).  
Water spray.

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

Hazardous decomposition products in case of fire : Under fire conditions, hazardous fumes will be present  
- CO<sub>x</sub>  
- NO<sub>x</sub>.

### 5.3. Advice for firefighters

Protection during firefighting : Wear proper protective equipment.

## SECTION 6: Accidental release measures

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

General measures : Wear suitable protective clothing.

#### 6.1.1. For non-emergency personnel

No additional information available

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

Do not allow to enter drains or water courses.

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

Methods for cleaning up : Dispose in a safe manner in accordance with local/national regulations.  
Sweep up dry powder and dispose properly.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Handle in accordance with good industrial hygiene and safety procedures.

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

Storage conditions : Store at ambient temperature  
Store in dry, well-ventilated area  
Light and moisture sensitive  
Keep container tightly closed and dry.

### 7.3. Specific end use(s)

For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

#### Hand protection:

| Type   | Material             | Permeation        | Thickness (mm) | Standard |
|--------|----------------------|-------------------|----------------|----------|
| Gloves | Nitrile rubber (NBR) | 6 (> 480 minutes) | 0,11           | EN 374   |

#### Eye protection:

Safety glasses (to European standard EN 166 or equivalent)

#### Skin and body protection:

Wear suitable protective clothing

**Respiratory protection:**

Where excessive dust may result, wear approved mask. Type P1 (EN 143)

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

|                                               |                               |
|-----------------------------------------------|-------------------------------|
| Physical state                                | : Solid                       |
| Appearance                                    | : Powder. Crystalline powder. |
| Molecular mass                                | : 155,2 g/mol                 |
| Colour                                        | : White.                      |
| Odour                                         | : Characteristic.             |
| Odour threshold                               | : No data available           |
| pH                                            | : 7 - 8,5 (20 g/l water)      |
| Relative evaporation rate<br>(butylacetate=1) | : No data available           |
| Melting point                                 | : $\geq 287$ °C               |
| 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)                     | : No data available           |
| Vapour pressure                               | : No data available           |
| Relative vapour density at 20 °C              | : No data available           |
| Relative density                              | : No data available           |
| Solubility                                    | : Water: 38,4 g/l (20 °C)     |
| Log Pow                                       | : -3,32                       |
| 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**

Bulk density :  $\approx 430$  kg/m<sup>3</sup>

**SECTION 10: Stability and reactivity****10.1. Reactivity**

Stable under normal conditions.

**10.2. Chemical stability**

Stable under normal conditions of storage, handling and use.

**10.3. Possibility of hazardous reactions**

This product is not hazardous.

**10.4. Conditions to avoid**

- Light (daylight)
- Moisture

- Heat.

### 10.5. Incompatible materials

- Strong oxidizers.

### 10.6. Hazardous decomposition products

When heated to decomposition, emits dangerous fumes:

- COx

- NOx.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

| L-Histidine (71-00-1) |               |
|-----------------------|---------------|
| LD50 oral rat         | > 16000 mg/kg |

Skin corrosion/irritation : Not classified  
pH: 7 - 8,5 (20 g/l water)

Serious eye damage/irritation : Not classified  
pH: 7 - 8,5 (20 g/l water)

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

No additional information available

### 12.2. Persistence and degradability

| L-Histidine (71-00-1) |        |
|-----------------------|--------|
| Biodegradation        | 55,6 % |

### 12.3. Bioaccumulative potential

| L-Histidine (71-00-1) |       |
|-----------------------|-------|
| Log Pow               | -3,32 |

### 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

Additional information : Prevent entry to sewers and public waters. Avoid release to the environment

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose in a safe manner in accordance with local/national regulations.

## SECTION 14: Transport information

In accordance with ADR / IATA / IMDG

| ADR                                     | IMDG          | IATA          |
|-----------------------------------------|---------------|---------------|
| <b>14.1. UN number</b>                  |               |               |
| Not regulated                           | Not regulated | Not regulated |
| <b>14.2. UN proper shipping name</b>    |               |               |
| Not regulated                           | Not regulated | Not regulated |
| Not regulated                           | Not regulated | Not regulated |
| <b>14.3. Transport hazard class(es)</b> |               |               |
| Not regulated                           | Not regulated | Not regulated |
| Not regulated                           | Not regulated | Not regulated |
| <b>14.4. Packing group</b>              |               |               |
| Not regulated                           | Not regulated | Not regulated |
| <b>14.5. Environmental hazards</b>      |               |               |
| Not regulated                           | Not regulated | Not regulated |
| No supplementary information available  |               |               |

### 14.6. Special precautions for user

#### Overland transport

Not regulated

#### - Transport by sea

Not regulated

#### - Air transport

Not regulated

### 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

No REACH Annex XVII restrictions

L-Histidine is not on the REACH Candidate List

L-Histidine is not on the REACH Annex XIV List

#### 15.1.2. National regulations

Ensure all national/local regulations are observed.

# L-Histidine

## Safety Data Sheet

H0710

according to Regulation (EU) 2015/830

### Germany

Reference to AwSV

: Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex 1 or 2; ID No. 6704)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV

: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

### Netherlands

SZW-lijst van kankerverwekkende stoffen

: The substance is not listed

SZW-lijst van mutagene stoffen

: The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding

: The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid

: The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling

: The substance is not listed

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Indication of changes:

|     |                  |          |                                                    |
|-----|------------------|----------|----------------------------------------------------|
| 1.4 | Emergency number | Modified |                                                    |
| 8.2 | Hand protection  | Modified | Specified material, thickness, et cetera of gloves |
| 9.1 | pH               | Modified |                                                    |

Abbreviations and acronyms:

|       |                                                                                                   |
|-------|---------------------------------------------------------------------------------------------------|
| ATE   | Acute Toxicity Estimate                                                                           |
| ADR   | European Agreement concerning the International Carriage of Dangerous Goods by Road               |
| BCF   | Bioconcentration factor                                                                           |
| CLP   | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008                       |
| DPD   | Dangerous Preparations Directive 1999/45/EC                                                       |
| DSD   | Dangerous Substances Directive 67/548/EEC                                                         |
| IATA  | International Air Transport Association                                                           |
| IMDG  | International Maritime Dangerous Goods                                                            |
| LC50  | Median lethal concentration                                                                       |
| LD50  | Median lethal dose                                                                                |
| LOAEL | Lowest Observed Adverse Effect Level                                                              |
| NOAEC | No-Observed Adverse Effect Concentration                                                          |
| PBT   | Persistent Bioaccumulative Toxic                                                                  |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| SDS   | Safety Data Sheet                                                                                 |

Data sources : ECHA (European Chemicals Agency). Manufacturer.

SDS Biochemicals version 2018

*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*