

## SAFETY DATA SHEET

Safety data sheet according to (EF) no. 1907/2006.

### POINT 1: Identification of material/compounds and of the company/factory

#### 1.1. Product identifier:

L-lysine 50 %

#### 1.2. Relevant identifying use of the material or compound and the usage that is contraindicated:

Feed ingredient

#### 1.3. Detailed information about the supplier for the safety data sheet:

Jorenku A/S  
Teglvaerksvej 11  
4733 Tappernoeye  
Denmark  
Tel.: +45 56214070

Responsible for safety data sheet (e-mail): jorenku@jorenku.dk

#### 1.4. Emergency phone:

Contact the poison centre in your own country.

### POINT 2: Identification of danger

#### 2.1. Classification of the material or compound:

CLP (1272/2008): None.

#### 2.2. Label elements:

None.

#### 2.3. Other dangers:

PBT/vPvB: The ingredients are not PBT/vPvB according to the criteria in REACH annex XIII.

Endocrine disrupting properties: The ingredients are not considered endocrine disruptors according to the criteria of Regulation 2017/2100 or Regulation 2018/605.

### POINT 3: Compensation of/information about contents

#### 3.1. Compensation of/information about contents

#### 3.2. Compounds:

Substance name	CAS	EF-No.	Index-no.	REACH reg.no.	Substance Classification	Note
L-lysine	56-87-1	200-294	-	-	-	-

### POINT 4: First aid measures

#### 4.1. Description of first aid measures:

General: Bring the person to fresh air. Keep calm under supervision. In case of discomfort: Seek medical attention.

Eyes: Rinse thoroughly with water or physiological saline. If possibly remove contact lenses and open the eye wide. In all cases, seek medical attention.

Ingestion: Immediately rinse mouth thoroughly and drink water in copious amounts. **Do not induce vomiting.** If vomiting occurs, keep the head low to avoid stomach contents in the lungs.

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

Mild irritation of the eyes with redness and sting.

#### 4.3. Indication of whether emergency medical attention and special treatment are needed:

Show this safety data sheet to doctors or casualty ward.

### POINT 5: Fire suppression

#### 5.1. Suppression methods:

Water fogging (never water jet - spreads the fire), foam, powder or carbon dioxide.

#### 5.2. Special dangers in connection with the material or compound:

Avoid inhalation of flue gases. In case of fire, very toxic gases are formed: Primarily carbon and nitric oxide.

#### 5.3. Indication for a fire department:

Use compressed air mask for heavy smoke.

### POINT 6: Accidental release measures

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

Use personal protective equipment - see point 8. Limit spread. Ensure good ventilation.

#### 6.2. Environmental protection indications:

Avoid discharge to drains - see point 12. Inform local environmental authorities in case of spillage to the environment.

#### 6.3. Methods and equipment for containment and cleaning:

Collected and handled as chemical waste. Rinse thoroughly with water. Further waste handling - see point 13.

#### 6.4. References to other points:

See above.

### POINT 7: Handling and storage

#### 7.1. Measures for safe handling:

Ensure effective ventilation. Avoid contact with skin and eyes. After use, wash with plenty of water and soap.

#### 7.2. Conditions for safe storage, including any incompatibility:

Cool, dry, in a well-ventilated area

#### 7.3. Special usage:

See use - point 1.

### PUNKT 8: Exposure control/personal protective equipment

#### 8.1. Control parameter:

AT-limit value (reg. 1426 of 28.06.2021): None

DNEL/PNEC: None.

## 8.2. Exposure control:

Appropriate measures for exposure control: None special.

Personal protective equipment:

Inhalation: Normally not necessary.

Skin: Use protective gloves (EN374) of nitrile rubber (> 0,4 mm). Breakthrough time: 8 hours.

Eyes: Tightly fitted safety goggles (EN 166) by risk of spatter.

Environmental exposure controls: None special.

## POINT 9: Physical and chemical characteristics

### 9.1. Information about basic physical and chemical characteristics:

Appearance:	Liquid
Colour:	Dark brown
Odor:	None
Melting point/freezing point (°C):	Not decided
Boiling point or bubble-point and boiling point interval (°C):	Approx. 105
Ignitability (solid, gaseous):	Not decided
Upper/lower explosion limits (vol-%):	Not decided
Flash point (°C):	Not decided
Auto-ignition temperature (°C):	Not decided
Self-accelerating decomposition temperature (°C):	Not decided
pH:	Approx. 10-11
Kinematic viscosity (mm <sup>2</sup> /s at 40°C):	Not decided
Solubility (mg/l):	Soluble in water
Partition coefficient n-octanol/water Log K <sub>ow</sub> :	Not decided
Vapor pressure (hPa, 20°C):	Not decided
Density and/or relative density (g/cm <sup>3</sup> ):	1,12-1,17
Relative vapor density (air=1):	Not decided
Particulate properties:	Not decided for liquids
<b>9.2. Other information:</b>	None known.

## POINT 10: Stability and reactivity

### 10.1. Reactivity:

None known.

### 10.2. Chemical stability:

Stable under recommended storage conditions - see point 7.

### 10.3. Risk of dangerous reactions:

None known.

### 10.4. Conditions that should be avoided:

None known.

### 10.5. Materials that should be avoided:

None known.

### 10.6. Dangerous decomposition products:

In case of fire or strong heating, very toxic gases are formed: Primarily carbon and nitric oxides.

## POINT 11: Toxicological information

### 11.1. Information about hazard classes as defined in Regulation (EC) No 1272/2008:

Acute toxicity: Based on available data, the classification criteria are not met.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitization: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproduction toxicity: Based on available data, the classification criteria are not met.

Single STOT-exposure: Based on available data, the classification criteria are not met.

Repeated STOT-exposures: Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Danger class	Data	Test	Data source
Acute toxicity:			
Inhalation	No available data.	-	-
Dermal	No available data.	-	-
Oral	LD <sub>50</sub> (rat) = 10,130 mg/kg (L-lysine)	Not informed	Supplier
Corrosivity/irritation:	No available data.	-	-
Sensitisation:	No available data.	-	-
CMR:	No available data.	-	-

Usual exposure methods: Gastrointestinal tract.

Symptoms

Inhalation: May be mild irritating to the mucous membranes of the respiratory tract.

Skin: May be mild irritating.

Eyes: May be irritating with redness and sting.

Ingestion: In large quantities (10-15 g) ingestion can cause diarrhoea.

Chronic effects: None known.

11.2. Information about other hazards: None known.

## POINT 12: Environmental information

### 12.1. Toxicity:

No available data.

### 12.2. Persistence and degradability:

No available data.

### 12.3. Bioaccumulative potential:

No expected bioaccumulation.

### 12.4. Mobility in soil:

No available data.

### 12.5. Results of PBT and vPvB assessment:

The ingredients are not PBT/vPvB according to the criteria in REACH annex XIII.

### 12.6. Endocrine-disrupting capacities:

None known.

## 12.7. Other adverse effects:

None known.

## POINT 13: Removal

### 13.1. Methods for waste handling:

Use the local authority's collection scheme.

**Chemical waste group:**     **EAK-code:**

H                                     16 05 09

## POINT 14: Transport information

**14.1. UN-number or ID-number:** None.

**14.2. UN-shipment designation (UN proper shipping name):**None.

**14.3. Transport danger class(es):** None.

**14.4. Packaging group:** None.

**14.5. Environmental dangers:** None.

**14.6. Special regulations for the user:** None.

**14.7. Bulk transport by sea according to IMO instruments:** Not relevant.

## POINT 15: Information about regulations

**15.1. Special determinations/special rules for the material or compound with respect to safety, health and environment:**

PR-no.: Not to be reported - see point 16.

**15.2. Chemical safety evaluation:**

No CSR.

## POINT 16: Other information

### Abbreviations:

AT = Working environment authority

CMR = carcinogenic, mutagenic, or toxic to reproduction

CSR = Chemical Safety Report

EC<sub>50</sub> = Effect Concentration 50 %

DNEL = Derived No-Effect Level

LC<sub>50</sub> = Lethal Concentration 50 %

LD<sub>50</sub> = Lethal dosage 50 %

PBT = Persistent, Bioaccumulative, Toxic

PNEC = Predicted No-Effect Concentration

FW = Fresh Water

vPvB = very Persistent, very Bioaccumulative

### Literature:

The supplier's safety data sheet

### Advice on training / instruction:

The product may only be used by persons who are carefully instructed in the execution of the work and who have knowledge of the contents of this safety data sheet.

# JORENKU Lysine

**Jorenku A/S**  
Teglvaerksvej 11  
DK-4733 Tappernoeye  
Tel.: +45 56 21 40 70  
jorenku@jorenku.dk  
www.jorenku.dk

**Further information:**

The product does not have to be registered in the Product Register, as it is not covered by the notification requirements.

**Changes since previous version:**

Not relevant - first edition.

Made by: Alttox a/s - Tonsbakken 16-18 - DK-2740 Skovlunde - Tel. +45 38 34 77 98 / PH - Quality control PW  
Translated by: Jorenku A/S - Teglvaerksvej 11 - DK-4733 Tappernoeye - Tel. +45 56 21 40 70 / LVB

