

**L-Lysine****DOC0(158-161)****SECTION 1 Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Identification of the product : Substance  
Trade name : L-Lysine  
CAS number : 000056-87-1  
Formula : C<sub>6</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub>  
Product Code : DOC 0(158-161)

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

1.2.1 Relevant identified uses : For research purposes only  
1.2.2 Uses advised against : No additional information available

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

Company identification : Formedium Ltd.  
King's Lynn, England, PE31 6DJ  
Tel: +44(0)1485 609069  
Web: www.Formedium.com  
E-mail: info@formedium.com

**1.4. Emergency telephone number**

Emergency telephone number : Tel: +44(0)1485 609069 (local time : 9.00 to 17.00)  
NHS Direct 111 (UK, 24 hours), 112 (EU, 24 Hours)

**SECTION 2 Hazards identification****2.1. Classification of the substance or mixture****Classification according to Regulation (EC) 1272/2008**

Not regulated

**2.2. Label elements****Labelling according to Regulation (EC) No. 1272/2008**

Hazards pictograms code : None  
Precautionary statements : None

**2.3. Other hazards**

None under normal conditions.

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**SECTION 3 Composition/information on ingredients****3.1. Substance / Preparation**Molecular weight g/mol : 146.19  
Structural formula: : C6H14N2O2

Substance name:	Contents	CAS No:	EC No:	Annex No:	Ref REACH	Classification
L-Lysine	> 97%	56-87-1	200-294-2	--	--	--

**SECTION 4 First aid measures****4.1. Description of first aid measures**

- Inhalation** : If breathed in, move person into fresh air. If not breathing give artificial respiration.
- Skin contact** : Wash off with soap and plenty of water.
- Eye contact** : Flush eyes with water as a precaution.
- Ingestion** : Rinse mouth with water. Never give anything by mouth to an unconscious person.

**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 Fire-fighting measures****5.1. Extinguishing media****Suitable extinguishing media** : Use water spray, Carbon dioxide (CO2), Alcohol resistant foam or Dry chemical powder.**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. COx, NOx.**5.3. Advice for firefighters**

Wear self contained breathing apparatus for fire-fighting if necessary.

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## SECTION 6 Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures****6.1.1. For non-emergency personnel****Protective equipment** : Wear recommended personal protective equipment.**Measures in case of dust release** : Avoid dust formation.**6.2. Environmental precautions**

Do not allow product to enter drains or water courses.

**6.3. Methods and material for containment and cleaning up****Methods for cleaning up** : Sweep up dry powder and dispose properly.

Keep in suitable, closed containers for disposal.

This material and its container must be disposed of in a safe way, and as per local / national legislation.

**6.4. Reference to other sections**

For disposal see section 13.

## SECTION 7 Handling and storage

**7.1. Precautions for safe handling****Precautions for safe handling** : Provide appropriate exhaust ventilation at places where dust is formed.**7.2. Conditions for safe storage, including any incompatibilities****Storage conditions** : Store in a dry, well ventilated area.

Keep container tightly closed.

Store in a cool place.

Strongly hygroscopic.

**7.3. Specific end use(s)**

For research purposes only

## SECTION 8 Exposure controls/personal protection

**8.1. Control parameters****Components with workplace control parameters** Contains no substances with occupational exposure limit values.**8.2. Exposure controls**

- **Eye protection** : Safety glasses to standard NIOSH (US) or EN 166 (EU).
- **Skin protection** : Wear suitable protective clothing.
- **Hand protection** : Gloves – Nitrile Rubber (NBR) to standard EN374
- **Respiratory protection** : Dust production: Dust mask with filter type P1.

## SECTION 9 Physical and chemical properties

**9.1. Physical and chemical properties**• **Appearance****Appearance** : Solid• **Odour****Odour** : no data available.

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- Odour threshold  
Odour threshold : No data available.
  - pH  
pH value : No data available.
  - Melting point / Freezing point  
Melting point (°C) : 215°C – decomposes on heating.
  - Initial boiling point – boiling range  
Boiling point (°C) : No data available.
  - Flash point  
Flash point (°C) : No data available.
  - Evaporation rate  
Evaporation rate (butylacetate =1) : No data available.
  - Flammability  
Flammability range (vol % in air) : No data available.
  - Explosion limits (lower – upper)  
Explosion limits : No data available.
  - Vapour pressure  
Vapour pressure : Not established.
  - Vapour density  
Relative vapour density (air=1) : No data available.
  - Relative density  
Density : No data available.
  - Bulk density  
Density : No data available.
  - Solubility  
Solubility in water : No data available.
  - Partition coefficient : n-octanol / water  
Log P n-octanol / water at 20°C : No data available.
  - Auto-ignition temperature  
Auto-ignition temperature (°C) : No data available.
  - Thermal decomposition  
Thermal decomposition (°C) : No data available.
  - Viscosity  
Viscosity : No data available.
  - Explosive properties  
Explosive properties : Not established.
  - Oxidising properties  
Oxidising properties : Not established.
- 9.2. Other information** : No data available.

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

No additional information available.

**10.2. Chemical stability****Stability** : Stable under normal conditions.**10.3. Possibility of hazardous reactions**

Strong oxidizing compounds.

**10.4. Conditions to avoid****Conditions to avoid** : Heat.**10.5. Incompatible materials****Materials to avoid** : Strong oxidizing agents.**10.6. Hazardous decomposition products****Hazardous decomposition products** : No data available.**SECTION 11 Toxicological information****11.1. Information on toxicological effects**

<b>Acute toxicity</b>		: Not classified.
<b>Skin corrosion / irritation</b>		: Not classified.
<b>Serious eye damage / irritation</b>		: Not classified.
<b>Respiratory or skin sensitisation</b>		: Not classified.
<b>Germ cell mutagenicity</b>		: Not classified.
<b>Carcinogenicity</b>		: Not classified.
<b>Reproductive toxicity</b>		: Not classified.
<b>STOT – single exposure</b>		: Not classified.
<b>STOT – repeated exposure</b>		: Not classified.
<b>Aspiration hazard</b>		: Not classified.
<b>Potential health effects</b>	<b>Inhalation</b>	: May be harmful if inhaled. May cause respiratory tract irritation.
	<b>Ingestion</b>	: May be harmful if swallowed.
	<b>Skin</b>	: May be harmful if absorbed through skin. May cause skin irritation.
	<b>Eyes</b>	: May cause eye irritation.

**Signs and symptoms of exposure**

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

**Additional information** : RTECS: OL5540000**11.2. Additional Information****Endocrine disrupting properties** :

The Substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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**SECTION 12 Ecological information****12.1. Toxicity**

No additional information available.

**12.2. Persistence - 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 data available.

**12.7. Endocrine disrupting properties**

The Substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**SECTION 13 Disposal considerations****13.1. Waste treatment methods**

**Product** : Offer surplus and non-recyclable solutions to a licensed disposal company.  
**Contaminated packaging** : Dispose of as unused product.

**SECTION 14 Transport information****14.1. UN Number**

Not applicable.

**General information** : Not classified as dangerous in the meaning of transport regulations.

**14.2. UN Proper shipping name**

Not applicable.

**14.3. Transport Hazard Class(es)**

Not applicable.

**14.4. Packing group**

Not applicable.

**14.5. Environmental hazards**

Not applicable.

**14.6. Special precautions for user**

Not applicable.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC code**

Not applicable.

**L-Lysine****DOC0(158–161)****SECTION 15 Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety datasheet complies with the requirements of Regulation (EU) No. 2015/830.

**15.2. Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out.

**SECTION 16 Other information****Further information****Revision**

: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Formedium Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product.

: Complete SDS revision

End of document