

L-Arginine**DOC0(106-109)****SECTION 1 Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Identification of the product : Raw material
Product code : DOC0(106-109)
Trade name : L-Arginine
EC-No : 200-811-1
CAS number : 000074-79-3
Formula : C6H14N4O2

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**

Serious eye damage / eye irritation (Category 2) H319
May cause respiratory irritation (Category 3) H335
For the full text of the H-Statements mentioned in this section, see Section 16.

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

Signal Word : Warning
Hazardous ingredients : L-Arginine
Hazard statement(s) : H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
Precautionary statement(s) : P280 Wear protective gloves, protective clothing, eye protection, face protection.
P305 + P351 IF IN EYES : Rinse cautiously with water for several minutes.
P337 + P313 If eye irritation persists : Get medical advice / attention.



GHS07

L-Arginine**DOC0(106-109)****SECTION 2 Hazards identification (continued)****2.3. Other hazards**

No additional information available.

SECTION 3 Composition/information on ingredients**3.1. Substance / Preparation**Name: Arginine (L-)
CAS-No.: 000074-79-3
EC-No.: 200-811-1**Hazardous ingredients according to Regulation (EC) No. 1272/2008**

Component:	Concentration	CAS No	EC No	Classification
L-Arginine	>= 98.5%	74-79-3	200-811-1	Serious eye damage / eye irritation H319

For the full text of the H-Statements mentioned in this Section, see section 16.

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

If inhaled	Assure fresh air breathing.
In case of skin contact	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
In case of eye contact	Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
If swallowed	Rinse mouth.

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** Water spray, alcohol resistant foam, dry chemical powder or carbon dioxide (CO₂).**5.2. Special hazards arising from the substance or mixture**Under fire conditions, hazardous fumes will be present. CO_x NO_x.**5.3. Advice for firefighters**

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Other information : Prevent fire fighting water from entering the environment.

L-Arginine**DOC0(106-109)****Section 8: Exposure controls / personal protection (continued)****Respiratory protection**

Dust production: Dust mask with filter type P1.

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

Physical state	Solid
Appearance	Crystals. Powder.
Colour	White.
Molecular mass	174.2 g/mol
Odour	No data available
Odour Threshold	No data available
pH	No data available
pH solution	10.5 – 12 100 g/L
Melting point	216 – 222 °C
Freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Relative evaporation rate	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
Water solubility	150 g/L
Log Pow	No data available
Auto-ignition temperature	No data available
Decomposition temperature	244 °C
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Explosive limits	No data available

9.2. Other safety information

No data available

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

No additional information available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available.

10.4. Conditions to avoid

Light (daylight). Moisture.

10.5. Incompatible materials

Strong oxidizers. Strong acids. Alkali.

10.6. Hazardous decomposition products

When heated to decomposition, emits dangerous fumes.– Carbon oxides (COx), Nitrogen oxides (NOx).

SECTION 11 Toxicological information**11.1. Information on toxicological effects****Acute toxicity**

LD50 oral – Rat – >5110 mg/kg

Skin corrosion / irritation

Not classified

Serious eye damage / eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Not classified

Germ cell mutagenicity

Not classified

Carcogenicity

Not classified

Reproductive toxicity

Not classified

Specific target organ toxicity**Single exposure** – Not classified**NOAEL (oral rat 90 days****Repeated exposure** – Not classified**Aspiration hazard**

3565.1 mg/kg bodyweight / day

Not classified

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.

L-Arginine**DOC0(106-109)****SECTION 12 Ecological information****12.1. Toxicity**

LC50 fish 1 : 2.8 mg/l Brachydanio rerio (zebra fish).

12.2. Persistence - degradability

Biodegradation : 60%.

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

Moderately toxic to aquatic life. Prevent entry to sewers and public waters. Avoid release to the environment.

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**

Dispose of this material and its containers to hazardous or special waste collection point.

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

L-Arginine**DOC0(106-109)****SECTION 15 Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety data sheet complies with the requirements of Regulation (EC) No. 2015/830.

15.2. Chemical Safety Assessment

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

SECTION 16 Other information**Full text of H- and EUH-statements referred to under sections 2 and 3.**

Eye irritation 2

H319

Respiratory tract irritation

H335

Eye irritation. Category 2

Causes eye irritation.

Specific Target Organ Toxicity. STOT SE3

May cause respiratory irritation.

Further information

: 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.

Revision

: Complete SDS revision

End of document