

Safety Data Sheet

#57277571 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
DL-Lysine	70-54-2	C6H14N2O2	10	27 Aug 2026

SECTION 1

Identification

Product name	DL-Lysine
CAS number	70-54-2
Chemical formula	C6H14N2O2
Molecular weight	146.19
SMILES	<chem>C(CCN)CC(C(=O)O)N</chem>
EC / EINECS number	200-740-6
Recommended use & restrictions	For research and development. Laboratory chemicals. Manufacture of substances. Not suitable for human or veterinary purposes.
Emergency telephone	0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification



WARNING

CODE	HAZARD STATEMENT
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
CODE	PRECAUTIONARY STATEMENT
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P271	Use only outdoors or in a well-ventilated area
P280	Wear protective gloves/protective clothing/eye protection/face protection
P302+P352	IF ON SKIN: Wash with soap and water
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Other hazards (e.g. PBT / vPvB, not classified)	Does not contain components considered to be persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB). Does not contain components considered to have endocrine-disrupting properties

SECTION 3

Composition / information on ingredients

Purity / concentration	~100.0%
Impurities / stabilising additives	Not applicable

SECTION 4

First-aid measures

Inhalation	Move person to fresh air; if not breathing, give artificial respiration and consult a physician.
Skin contact	Wash affected area with soap and water; consult a physician if symptoms are observed.
Eye contact	Immediately rinse eyes with plenty of water for at least 15 minutes and consult a physician.
Ingestion	Rinse mouth with water; do not induce vomiting unless advised by a physician or Poison Control Center; seek medical attention.
Symptoms / effects & medical attention	<i>Not applicable</i>

SECTION 5

Fire-fighting measures

Suitable extinguishing media	Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	No specific firefighting procedure given
Special hazards	Carbon Monoxide (CO) Carbon Dioxide (CO ₂) Nitrogen oxides (NO _x)
Advice for firefighters	Wear self-contained breathing apparatus for fire fighting if necessary.

SECTION 6

Accidental release measures

Personal precautions & PPE	Wear respiratory protection; avoid dust formation, breathing vapours, mist, gas, or dust; ensure adequate ventilation; avoid contact with skin, eyes or clothing.
Environmental precautions	Prevent further leakage or spillage; do not let product enter drains.
Containment & clean-up methods	Pick up and arrange disposal without creating dust; sweep up and shovel; keep in suitable, closed containers for disposal.

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

Storage temperature	Ambient
Precautions for safe handling	Avoid contact with skin and eyes; avoid formation of dust and aerosols; provide appropriate exhaust ventilation.
Conditions for safe storage (incompatibilities)	Keep container tightly closed in a dry and well-ventilated place. Hygroscopic. Store under inert gas.

SECTION 8

Exposure controls / personal protection

Occupational exposure limits (OEL / WEL) *Not applicable*

DNEC/PNEC data *Not applicable*

Eye / face protection Safety glasses
Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.

Skin / hand protection Protective gloves.

Respiratory protection Dust mask (FFP2/FFP3)
Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.

SECTION 9

Physical & chemical properties

Density (g/mL) 1 g/mL
DERIVED FROM: LITERATURE

Flash point *Not applicable*

Acidity Base
DERIVED FROM: LITERATURE

Appearance / physical state Solid
DERIVED FROM: LITERATURE

Colour Pale Yellow to Light Beige Solid
DERIVED FROM: LITERATURE

Odour Not known
DERIVED FROM: LITERATURE

Melting / freezing point 167 - 170°C
DERIVED FROM: LITERATURE

Boiling point *No data available*

Solubility (water) Methanol (Slightly), Water (Slightly)
DERIVED FROM: LITERATURE

pH *No data available*

Vapour pressure *No data available*

Partition coefficient (log Pow) *No data available*

Auto-ignition / decomposition temp *No data available*

SECTION 10

Stability & reactivity

Chemical stability / reactivity Stable under recommended storage conditions.

Conditions to avoid None known

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products In the event of fire: See section 5.

SECTION 11

Toxicological information

Acute toxicity (LD50 / LC50) Acute Toxicity Estimate (ATE): LD50 > 300 mg/kg < 2000 mg/kg

Skin corrosion / irritation Causes skin irritation

Eye corrosion / irritation Causes serious eye irritation

Respiratory / skin sensitisation *No data available*

Carcinogenicity *No data available*

Mutagenicity *No data available*

Reproductive toxicity *No data available*

STOT (single / repeated exposure) Single exposure: May cause respiratory irritation

Aspiration hazard *No data available*

Endocrine disruptors Not considered to be an endocrine disruptor

SECTION 12

Ecological information

Aquatic toxicity *No data available*

Persistence & degradability *No data available*

Bioaccumulative potential *No data available*

Mobility in soil *No data available*

PBT / vPvB assessment *No data available*

SECTION 13

Disposal considerations

Waste treatment / disposal methods Dispose of in accordance with local/national regulations

SECTION 14

Transport information

UN number	Not applicable
Proper shipping name	Not applicable
Class	Not applicable
Packing group	Not applicable
Transport category	Not applicable
Tunnel code	Not applicable
Packing instruction (ADR)	Not applicable
Packing instruction (IMDG)	Not applicable
Environmental hazards	Not applicable
Special precautions for user	Not applicable

SECTION 15

Regulatory information

REACH code	Y113
UFI code	Not applicable
ECHA notification	Not applicable
Chemical safety assessment carried out?	No

SECTION 16

Other information

Revision notes / other information	This is the first version of this MSDS.
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