

L-GLUTAMINE FOR BIOCHEMISTRY

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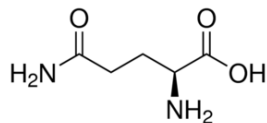
according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
SDS Reference Number: 03960
□□□□□□: 4/9/2014 □□□□□□: 12/18/2024 □□□□: 6/20/2016 □□: 1.0

□□ 1: □□□□□ □□□ □□ □□

1.1. □□□□

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EC □□
CAS □□
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: □□
: L-GLUTAMINE FOR BIOCHEMISTRY
: 200-292-1
: 56-85-9
: 03960
: Amino acids
: C5H10N2O3
:



□□ □□ : levo-Glutamide, 2,5-Diamino-5-oxopentanoic acid, 2-Amino-4-carbamoylbutanoic acid

1.2. □□□□ □□ □□□□ □□ □□ □□ □□

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: Industrial
For professional use only
: Laboratory chemicals
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1.3. □□□□□□□□ □□□ □□

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1.4. □□□□□□

□□ □□ □□ : + 91 22 6663 6663 (9:00am - 6:00 pm)

□□ 2: □□□·□□□

2.1. □□□·□□□ □□

Regulation (EC) No.1272/2008 [CLP]□ □□ □□

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To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. □□□□□□□ □□□ □□□□ □□

□□ (EC) No. 1272/2008 □ □□ □□ □□[CLP]

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2.3. □□ □□

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

L-GLUTAMINE FOR BIOCHEMISTRY

□□□□□□□□

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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3.1. □□□□

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□□	□□□□	%
L-GLUTAMINE	CAS □□: 56-85-9 EC □□: 200-292-1	100

□□ 4: □□□□□□

4.1. □□□□ □□

□□ □□ □□ : If you feel unwell, seek medical advice.
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□□□ □□ : □□ □□□□□□. Do not induce vomiting. □□□□ □□□ □□□□(□□)□ □□□ □□□□□□.
First-aid measures for first aider : □□□□ □□□□ □□□ □□ □□ □□□ □□□□ □□□□.

4.2. □□ □ □□□□ □□ □□□ □□ □ □□□

□□ □ □□/□□ : None under normal conditions. Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.
□□ □□ □ □□/□□ : None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.
□ □□ □ □□/□□ : None under normal conditions. Dust from this product may cause eye irritation.
□□ □ □□/□□ : None under normal conditions.

4.3. □□□□ □□ □ □□ □□ □□ □□ □□ □□

Treat symptomatically.

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5.1. □□□ □□□

□□□ □□□ : Water spray. Foam. Dry powder. Carbon dioxide.
□□□□ □□□ : Do not use a heavy water stream.

5.2. □□□□□□□ □□□ □□ □□□□

□□ □□ : No fire hazard.
□□ □□ : No direct explosion hazard.
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5.3. □□□□□ □□ □□

□□ □□ : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
□□ □□ □ □□ : Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. □□□ □□□□□□□□. Complete protective clothing.

L-GLUTAMINE FOR BIOCHEMISTRY

□□□□□□□□

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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6.1. □□□ □□□□ □□ □□□ □□□□ □□□□

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- □□□
- □□ : Wear recommended personal protective equipment.
- □□ : Ventilate spillage area. Evacuate unnecessary personnel.
- □□□□
- □□ : Do not attempt to take action without suitable protective equipment. □□□ □□ □□□□ □□□□□□. □□ □□□ □□□ □□ 8: "□□□□ □ □□□□□"□ □□□□□.
- □□ : Ventilate area. Evacuate unnecessary personnel.

6.2. □□□ □□□□ □□ □□□ □□□□

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6.3. □□ □□ □□ □□

- : Using a clean shovel, put the material in a dry container and cover without compressing it.
- □□ : Mechanically recover the product. □□□□ □□□□. On land, sweep or shovel into suitable containers.
- □□□□ : Dispose of materials or solid residues at an authorized site.

6.4. □□ □□ □□

For further information refer to section 13.

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7.1. □□□□□□

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- : Ensure good ventilation of the work station. □□ □□□□ □□□□□. □□ □ □□□ □□□ □□□□. Do not breathe vapours.
- □□ : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. □ □□□ □□□ □□□ □□□, □□□□ □□□□ □□□. Always wash hands after handling the product.

7.2. □□□□ □□□ □□□ □□□ □□ □□

- □□ : Keep in a cool, well-ventilated place away from heat.
- □□ : □□□ □□□ □□□□□.
- : Store always product in container of same material as original container.

7.3. □□ □□ □□

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8.1. □□ □□ □□

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8.2. □□□□

- □□□ □□
- □□□ □□ : Ensure good ventilation of the work station.

L-GLUTAMINE FOR BIOCHEMISTRY

□□□□□□□□

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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□□ □□□:

Wear recommended personal protective equipment.

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□ □ □:

Chemical goggles or safety glasses

Skin protection

□□ □□:

Wear a mask

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Protective gloves

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Wear appropriate mask

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□□ 9: □□□□□ □□

9.1. □□□□ □□□□□ □□□ □□ □□

□□□ □□	: □□
□□	: White.
□□	: Powder.
□□□	: 146.15 g/mol
□□	: Odourless.
□□ □□	: □□□□
□□□	: 185 °C (Decomposes)
□□□	: □□□□
□□ □□□□ □□□ □□	: □□□□
□□□	: □□□
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□□□□ □□	: □□□□
□□ □□	: □□□□
pH	: 5 – 6 at 25 °C
pH □□	: 14.6 g/L
□□(□□□)	: □□□□
□□□	: □: 14.6 g/l at 20 °C - completely soluble
	□□□: Insoluble in ethanol
	□□□: Soluble in ether
Partition coefficient n-octanol/water (Log Kow)	: □□□□
Partition coefficient n-octanol/water (Log Pow)	: -3.15 at 20 °C - Bioaccumulation is not expected.
□□□	: 0.00000002 mm Hg
50°C□□□□ □□□	: □□□□
□□	: 1.364 g/cm ³
□□	: □□□□
20°C□□□□ □□ □□ □□	: □□□□
Particle size	: □□□□

L-GLUTAMINE FOR BIOCHEMISTRY

□□□□□□□□

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

9.2. □□□□□□

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□□ 10: □□□□□□□□

10.1. □□□□

The product is non-reactive under normal conditions of use, storage and transport.

10.2. □□□□□□

Stable under normal conditions.

10.3. □□□□□□□□

No dangerous reactions known under normal conditions of use.

10.4. □□□□□□□□

□□□□. Extremely high or low temperatures.

10.5. □□□□□□□□

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10.6. □□□□□□□□□□

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

□□ 11: □□□□□□□□

11.1. □□ (EC) No 1272/2008 □□□□, □□□□□□□□□□

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□□□□ (□□)	:	□□□□□□
□□□□□□□□□□	:	□□□□□□ pH: 5 – 6 at 25 °C
□□□□□□□□□□	:	□□□□□□ pH: 5 – 6 at 25 °C
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□□□□□□□□ (□□□□)	:	□□□□□□
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L-GLUTAMINE FOR BIOCHEMISTRY (56-85-9)

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11.2. □□□□□□

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□□ 12: □□□□□□□□

12.1. □□□□

□□□□ - □□□□ : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

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L-GLUTAMINE FOR BIOCHEMISTRY

□□□□□□□□

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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12.2. □□□ □□□□

L-GLUTAMINE FOR BIOCHEMISTRY (56-85-9)

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12.3. □□ □□□

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12.4. □□ □□□

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12.5. PBT □ vPvB □□ □□

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12.6. □□□ □□ □□

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12.7. □□ □□ □□

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□□ 13: □□□ □□□□

13.1. □□□ □□□

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: Disposal must be done according to official regulations.

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

: Disposal must be done according to official regulations.

: Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.

: Do not re-use empty containers.

□□ 14: □□□ □□□ □□

ADR / IMDG / IATA / ADN / RID □□ □□

14.1. UN □□ □□ ID □□

□□ □□□□ □□□□

14.2. UN □□ □□□

□□ □□□ (ADR)

: Not regulated

□□ □□□ (IMDG)

: Not regulated

□□ □□□ (IATA)

: Not regulated

□□ □□□ (ADN)

: Not regulated

□□ □□□ (RID)

: Not regulated

14.3. □□□□□ □□□ □□

ADR

□□□□□ □□□ □□ (ADR)

: Not regulated

IMDG

□□□□□ □□□ □□ (IMDG)

: Not regulated

IATA

□□□□□ □□□ □□ (IATA)

: Not regulated

L-GLUTAMINE FOR BIOCHEMISTRY

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according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADN

□□□□□ □□□ □□ (ADN) : Not regulated

RID

□□□□□ □□□ □□ (RID) : Not regulated

14.4. □□□□

□□ □□ (ADR) : Not regulated

□□ □□ (IMDG) : Not regulated

□□ □□ (IATA) : Not regulated

□□ □□ (ADN) : Not regulated

□□ □□ (RID) : Not regulated

14.5. □□ □□□□

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14.6. □□□□ □□ □□ □□□□

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Not regulated

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Not regulated

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Not regulated

14.7. □□□□□□ (IMO) □□ □□ □□ □□

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□□ 15: □□ □□□□

15.1. □□, □□ □ □□□ □□□□ □□□□ □□ □□ □□ □□/□□

EU □□

REACH □□□ XVII (□□ □□)

REACH □□□ XVII □□ □□ □

REACH □□□ XIV (□□ □□)

REACH □□□ XIV (□□ □□) □□ □□ □

REACH □□ □□ □□ (SVHC)

REACH □□ □□□ □□□ □□ □□ □□

PIC □□ (□□□□□□)

PIC □□□ □□ □ □ (□□ EU 649/2012)

POP □□ (□□□□ □□ □□□□)

POP □□□ □□ □ □ (□□ EU 2019/1021)

Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

□□□□ □□ (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

L-GLUTAMINE FOR BIOCHEMISTRY

□□□□□□□□

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

□□ □□□□ □□ (2019/1148)

□□□ □□□□ □□(□□ □□□□□□ □□ □ □□□ □□ □□ EU 2019/1148)□ □□□ □□ □□ □□

□□ □□□□ □□ (273/2004)

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VOC ordinance (ChemVOCFarbV) :

WGK : WGK 3, □□ □□ □□□ (Classification according to AwSV).

□□ □□ □□(12. BImSchV) : □□ □□ □□(12. BImSchV)□ □□ □□ □□

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SZW-lijst van kankerverwekkende stoffen : □□□ □□

SZW-lijst van mutagene stoffen : □□□ □□

SZW-lijst van reprotoxische stoffen – Borstvoeding : □□□ □□

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : □□□ □□

SZW-lijst van reprotoxische stoffen – Ontwikkeling : □□□ □□

15.2. □□ □□ □□□ □□

No chemical safety assessment has been carried out

□□ 16: □ □□ □□□□

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ACGIH	American Conference of Government Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	□□ □□ □
BOD	Biochemical oxygen demand (BOD)
CAS □□	□□□□ □□ □□ □□(CAS)
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	□□□ □□ □□□
CSA	□□ □□ □□□ □□
DMEL	Derived Minimal Effect level
DNEL	□□ □□□ □□
EC □□	□□ □□□ □□
EC50	Median effective concentration
ED	□□□ □□□□
EN	□□ □□
EWC	European waste catalogue
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration

L-GLUTAMINE FOR BIOCHEMISTRY

□□□□□□□□

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

□□ □ □□□□□:	
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development
OEL	□□□ □□ □□
OSHA	Occupational Safety & Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	□□ □□□ □□
PPE	□□ □□□
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	□□□□□□□□
STP	Sewage treatment plant
TF	□□□ □□
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average
COV	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	□□ □□ □□□

□□□□□□□□(SDS), EU

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