

according to Regulation (EC) No. 1907/2006

### L-GLUTAMINE

Version 2.0	Revision Date 07.12.2018	Print Date 23.02.2021						
SECTION 1: Identification of the substance/mixture and of the company/undertaking								
1.1 Product identifier	1.1 Product identifier							
Product name	: L-GLUTAMINE							
Material number	: BEBP17-605E							
1.2 Relevant identified uses of the subst	ance or mixture and uses advised against	t						
Use of the Substance/Mixture	: For Research Use Only. Not for use in dia	agnostic procedures.						
1.3 Details of the supplier of the safety d	ata sheet							
Company	: Lonza Ltd Muenchensteinerstrasse 38 CH-4002 Basel, Switzerland Business Telephone: +41 61 316 81 11							
	<b>Lonza Verviers Sprl</b> Parc Industriel de Petit-Rechain BE-4800 Verviers, Belgium Business Telephone: +32 8732 1611							
	Lonza Cologne GmbH Nattermannallee 1 DE-50829 Köln, Germany Business Telephone: + 49 221 99 1990							
	Lonza Copenhagen ApS Strandhaven 12 DK-2665 Vallensbaek Strand, Denmark Business Telephone: + 45 4356 7400							
E-mail address Responsible/issuing person	sds@lonza.com							
1.4 Emergency telephone number								
Emergency telephone number	: Lonza Ltd, CH-4002 Basel, Switzerland Telephone: +41 61 313 94 94 (24h)							

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

#### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

#### Components

Remarks

: No hazardous ingredients

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures If inhaled : No special precautions required. In case of skin contact : Wash with water and soap as a precaution. If skin irritation persists, call a physician. In case of eye contact : Immediately flush eye(s) with plenty of water. If eye irritation persists, consult a specialist. If swallowed Immediately give large quantities of water to drink. : Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

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

Symptoms	: No information ava
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#### 4.3 Indication of any immediate medical attention and special treatment needed ent

Treatm	۱e

: No information available.

#### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media	: Water spray
	Dry powder
	Foam

#### 5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Heating or fire can release toxic gas.

#### 5.3 Advice for firefighters

Special protective equipment for firefighters	: In the event of fire, wear self-contained breathing apparatus.
Further information	: Use water spray to cool unopened containers.

#### **SECTION 6:** Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

#### **6.2 Environmental precautions**

Environmental precautions : Prevent product from entering drains.

#### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up

: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

#### 6.4 Reference to other sections

For personal protection see section 8.

#### SECTION 7: Handling and storage

<b>7.1 Precautions for safe handling</b> Advice on safe handling	:	No special precautions required.					
Advice on protection against fire and explosion	:	Take precautionary measures against static discharges.					
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice.					
7.2 Conditions for safe storage, includi	7.2 Conditions for safe storage, including any incompatibilities						
Requirements for storage areas and containers	:	No special storage conditions required.					
7.3 Specific end use(s)							
Specific use(s)	:	No information available.					

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

#### **Occupational Exposure Limits**

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure controls

# Engineering measuresAvoid splashes.Personal protective equipmentEye protection:Safety glasses

Hand protection

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Material Rate of permeability	<ul> <li>Nitrile rubber</li> <li>&gt; 480 min</li> </ul>
Skin and body protection	: Choose body protection according to the amount and concentration of the dangerous substance at the work place. No special protective equipment required.
Respiratory protection	: No personal respiratory protective equipment normally required.

## **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

Appearance	:ne :	Aqueous solution
Colour	:	no data available
Odour	:	no data available
Odour Threshold	:	no data available
рН	:	4,9 - 6,0
Freezing point	:	no data available
Boiling point/boiling range	:	no data available
Flash point	:	does not flash
Evaporation rate	:	no data available
Flammability (solid, gas)	:	no data available
Upper explosion limit	:	no data available
Lower explosion limit	:	no data available
Vapour pressure	:	no data available
Relative vapour density	:	no data available
Relative density	:	no data available
Density	:	no data available
Solubility(ies) Water solubility	:	soluble
Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	no data available
Decomposition temperature	:	no data available
Viscosity	:	no data available
Explosive properties	:	no data available

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Oxidizing properties	:	no data available
9.2 Other information		
no data available		
SECTION 10: Stability and reactivit	ty	
<b>10.1 Reactivity</b> Stable under recommended storage	e con	ditions.
<b>10.2 Chemical stability</b> Stable under normal conditions.		
10.3 Possibility of hazardous reaction	S	
Hazardous reactions	:	Stable under normal conditions.
10.4 Conditions to avoid		
Conditions to avoid	:	no data available
10.5 Incompatible materials		
Materials to avoid	:	Strong oxidizing agents
<b>10.6 Hazardous decomposition produc</b> No decomposition if stored normally		
SECTION 11: Toxicological information	atio	n
_		n
11.1 Information on toxicological effect		n
_		n Remarks: No data is available on the product itself.
11.1 Information on toxicological effect	cts	
11.1 Information on toxicological effect Further information SECTION 12: Ecological information	cts	
11.1 Information on toxicological effect Further information	cts	
<ul> <li>11.1 Information on toxicological effect</li> <li>Further information</li> <li>SECTION 12: Ecological information</li> <li>12.1 Toxicity</li> <li>Toxicity to fish</li> </ul>	on	Remarks: No data is available on the product itself.
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be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

Additional ecological information

: no data available

:

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product

Dispose of in accordance with local regulations.

#### **SECTION 14: Transport information**

ΙΑΤΑ			Not dangerous goods
14.1	UN number	:	Not applicable
14.2	Proper shipping name		Not applicable
14.3	Transport hazard class		Not applicable
14.4	Packing group		Not applicable
14.5	Environmental hazards		no
IMDG			Not dangerous goods
14.1	UN number	:	Not applicable
14.2	Proper shipping name		Not applicable
14.3	Transport hazard class		Not applicable
14.4	Packing group		Not applicable
14.5	Environmental hazards		Marine pollutant: no
ADR		:	Not dangerous goods
14.1	UN number	:	Not applicable
14.2	Proper shipping name		Not applicable
14.3	Transport hazard class		Not applicable
14.4	Packing group		Not applicable
14.5	Environmental hazards		no
RID		:	Not dangerous goods
14.1	UN number	:	Not applicable
14.2	Proper shipping name		Not applicable
14.3	Transport hazard class		Not applicable
14.4	Packing group		Not applicable
14.5	Environmental hazards		no

DOT		:	Not dangerous goods
14.1 14.2 14.3 14.4 14.5	Packing group	:	Not applicable Not applicable Not applicable Not applicable no
TDG		:	Not dangerous goods
14.1 14.2 14.3 14.4 14.5	Transport hazard class Packing group	:	Not applicable Not applicable Not applicable Not applicable no
14.6	Special precautions for user	:	none
14.7	Transport in bulk according to Annex II of Marpol and the IBC Code	:	Not applicable

#### **SECTION 15: Regulatory information**

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Restrictions on the manufacture market and use of certain dangerous subs and articles (Annex XVII)		:	Not applicable
REACH - Candidate List of Substances of for Authorisation (Article 59).	f Very High Concern	:	Not applicable
REACH - List of substances subject to aut XIV)	thorisation (Annex	:	Not applicable
Regulation (EC) No 1005/2009 on substan ozone layer	nces that deplete the	:	Not applicable
Regulation (EC) No 850/2004 on persister	nt organic pollutants	:	Not applicable
Seveso III: Directive 2012/18/EU of the Eu major-accident hazards involving dangero	•	nd o	of the Council on the control of
National regulatory information			
•	WGK 1 slightly hazard Classification accordir		s to water o AwSV, Annex 1 (5.2)

# 15.2 Chemical safety assessment

not required

#### **SECTION 16: Other information**

#### Further information

#### Full text of other abbreviations

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; ATE -Acute Toxicity Estimate; AwSV - Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen / Ordinance on facilities for handling substances that are hazardous to water; BPR - Biocidal Product Regulation; bw - Body weight; CAS - Chemical Abstract Service; CLP - Classification Labelling Packaging Regulation, Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DNEL-Derived No Effect Level; DOT - Department of Transportation; EC – European Community; ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; EmS (Emergency Response Procedures for Ships Carrying Dangerous Goods); EN - European Standard; ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; EU OEL - European Occupational Exposure Limit; GHS -Globally Harmonized System of Classification and Labelling of Chemicals; GLP - Good Laboratory Practice; GV - Danish Exposure Limits for Substances and Materials; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; IMDG - International Maritime Dangerous Goods; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); LOFT - Danish Threshold Limit Value; MAK - German Threshold Limit Value; MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NIOSH/Guide - National Institute of Safety and Health Guidebook; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NTP -National Toxicology Program; OECD - Organization for Economic Co-operation and Development; PBT -Persistent, Bioaccumulative and Toxic substance; PEL - Permissible Exposure Limit; PNEC - Predicted no Effect Concentration; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; REL -Recommended Exposure Limit; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; STEL - Short-Term Exposure Limit; TDG - Transportation of Dangerous Goods; TGG -Dutch Threshold Limit Value; TGV - Swedish OEL; TLV Threshold Limit Value; TLV-C - Threshold Limit Value Ceiling; TWA -Time Weighted Average; UDS - Unscheduled DNA Synthesis; UN - United Nations; VLE - Valeurs limites d'exposition professionnelle aux agents chimiques en France; VME - Valeur (Limite) Moyenne d'Exposition; VOC - Volatile Organic Compound[s]; WEEL - Workplace Environmental Exposure Level; % w/w Percent weight by weight; %(V) Percent Volume

Date format

: dd.mm.yyyy

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