

ALFAAA17686

N-Benzyloxycarbonyl-L-glutamic acid

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

产品说明:	N-苄氧羰基-L-谷氨酸
Product Description:	N-Benzyloxycarbonyl-L-glutamic acid
Cat No. :	A17686
CAS No	1155-62-0
Molecular Formula	C13 H15 N O6
Supplier	Avocado Research Chemicals Ltd. (Part of Thermo Fisher Scientific) Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608
Emergency Telephone Number	For information US call: 001-800-227-6701 / Europe call: +32 14 57 52 11 Emergency Number US :001-201-796-7100 / Europe: +32 14 57 52 99 CHEMTREC Tel. No. US :001-800-424-9300 / Europe: 001-703-527-3887
E-mail address	begel.sdsdesk@thermofisher.com
Recommended Use	Laboratory chemicals.
Uses advised against	No Information available

SECTION 2. HAZARD IDENTIFICATION

Physical State
Powder Solid

Appearance White Odor Odorless

Emergency Overview

The product contains no substances which at their given concentration are considered to be hazardous to health.

<u>Classification of the substance or mixture</u> Based on available data, the classification criteria are not met

Label Elements

None required

Physical and Chemical Hazards None identified. Health Hazards

The product contains no substances which at their given concentration are considered to be hazardous to health.

Environmental hazards

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

This product does not contain any known or suspected endocrine disruptors.

N-Benzyloxycarbonyl-L-glutamic acid

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
L-Glutamic acid, N-[(phenylmethoxy)carbonyl]-	1155-62-0	99

SECTION 4. FIRST AID MEASURES

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Inhalation Remove from exposure, lie down. Remove to fresh air.

Ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. If possible drink milk afterwards.

Most important symptoms and effects

No information available.

Self-Protection of the First Aider

No special precautions required.

Notes to Physician

Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO 2). Dry chemical. Alcohol resistant foam.

Extinguishing media which must not be used for safety reasons

No information available.

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Ensure adequate ventilation.

Environmental Precautions

See Section 12 for additional Ecological Information.

Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

SECTION 7. HANDLING AND STORAGE

Handling

Avoid contact with skin and eyes. Avoid contact with skin and clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Avoid breathing vapors or mists. Do not ingest. If swallowed then seek immediate medical assistance. Wash thoroughly after handling.

Storage

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

Specific Use(s)

Use in laboratories

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

Exposure Controls

Engineering Measures

None under normal use conditions. .

Personal protective equipment

Eve Protection	Wear safety glasses with side shields (or goggles) (European standard - EN 166)
	Treat daloty gladood man blad childlad (or gogglod) (Ediopodin blandara Ert roo)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Disposable gloves	See manufacturers	-	EN 374	(minimum requirement)
	recommendations			

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Skin and body protection	Long sleeved clothing
Respiratory Protection	No protective equipment is needed under normal use conditions.
Large scale/emergency use	Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced Recommended Filter type: Particle filter
Small scale/Laboratory use	Maintain adequate ventilation

N-Benzyloxycarbonyl-L-glutamic acid

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Physical State	White Powder Solid	
Odor Odor Threshold pH Melting Point/Range Softening Point Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas) Explosion Limits	Odorless No data available No information available 118 - 121 °C / 244.4 - 249.8 °F No data available No information available No information available Not applicable No information available No data available	Method - No information available Solid
Vapor Pressure Vapor Density Specific Gravity / Density Bulk Density Water Solubility Solubility in other solvents Partition Coefficient (n-octanol/wate Autoignition Temperature Decomposition Temperature Viscosity Explosive Properties Oxidizing Properties	No data available Not applicable No data available No data available No information available No information available er) No data available No data available Not applicable No information available No information available	Solid
Molecular Formula Molecular Weight	C13 H15 N O6 281.26	

SECTION 10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Hazardous Reactions Hazardous Polymerization	No information available. No information available.
Conditions to Avoid	Incompatible products.
Materials to avoid	Strong oxidizing agents. Oxidizing agent.

Hazardous Decomposition Products Nitrogen oxides (NOx). Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11. TOXICOLOGICAL INFORMATION

Product Information No acute toxicity information is available for this product

(a) acute toxicity;

(b) skin corrosion/irritation; No data available

N-Benzyloxycarbonyl-L-glutamic acid

(c) serious eye damage/irritation;	No data available			
(d) respiratory or skin sensitization; Respiratory Skin	No data available No data available			
(e) germ cell mutagenicity;	No data available			
(f) carcinogenicity;	No data available			
	There are no known carcinogenic chemicals in this product			
(g) reproductive toxicity;	No data available			
(h) STOT-single exposure;	No data available			
(i) STOT-repeated exposure;	No data available			
Target Organs	No information available.			
(j) aspiration hazard;	Not applicable Solid			
Symptoms / effects,both acute and delayed	No information available			
	SECTION 12. ECOLOGICAL INFORMATION			
Ecotoxicity effects	SECTION 12. ECOLOGICAL INFORMATION Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.			
Ecotoxicity effects Persistence and Degradability	Contains no substances known to be hazardous to the environment or that are not			
	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.			
Persistence and Degradability	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available			
Persistence and Degradability Bioaccumulative Potential	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available No information available			
Persistence and Degradability Bioaccumulative Potential Mobility in soil Endocrine Disruptor Information Persistent Organic Pollutant	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available No information available No information available This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance			
Persistence and Degradability Bioaccumulative Potential Mobility in soil Endocrine Disruptor Information Persistent Organic Pollutant	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available No information available This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance			

N-Benzyloxycarbonyl-L-glutamic acid

Other Information	Waste codes should be assigned by the user based on the application for which the product was used.
	SECTION 14. TRANSPORT INFORMATION
Road and Rail Transport	Not Regulated
IMDG/IMO	Not regulated
ΙΑΤΑ	Not regulated
Special Precautions for User	No special precautions required
	SECTION 15. REGULATORY INFORMATION

International Inventories

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

	The Inventory of Hazardous Chemicals (2015 Edition)	goods GB	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
L-Glutamic acid, N-[(phenylmethoxy)car bonyl]-	-	-	Х	-	214-584-1	Х	-	-	Х	Х	-	-

National Regulations

SECTION 16. OTHER INFORMATION

Prepared By	Health, Safety and Environmental Department
Revision Date	16-May-2024
Revision Summary	New emergency telephone response service provider.

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Legend

CAS - Chemical Abstracts Service	TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances	DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances	ENCS - Japanese Existing and New Chemical Substances
IECSC - Chinese Inventory of Existing Chemical Substances	AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances	NZIOC - New Zealand Inventory of Chemicals

N-Benzyloxycarbonyl-L-glutamic acid

WEL - Workplace Exposure Limit	TWA - Time Weighted Average
ACGIH - American Conference of Governmental Industrial Hygienists	IARC - International Agency for Research on Cancer
DNEL - Derived No Effect Level	PNEC - Predicted No Effect Concentration
RPE - Respiratory Protective Equipment	LD50 - Lethal Dose 50%
LC50 - Lethal Concentration 50%	EC50 - Effective Concentration 50%
NOEC - No Observed Effect Concentration	POW - Partition coefficient Octanol:Water
PBT - Persistent, Bioaccumulative, Toxic	vPvB - very Persistent, very Bioaccumulative
ICAO/IATA - International Civil Aviation Organization/International Air	IMO/IMDG - International Maritime Organization/International Maritime
Transport Association	Dangerous Goods Code
ADR - European Agreement Concerning the International Carriage of	MARPOL - International Convention for the Prevention of Pollution from
Dangerous Goods by Road	Ships
OECD - Organisation for Economic Co-operation and Development	ATE - Acute Toxicity Estimate
BCF - Bioconcentration factor	VOC - (Volatile Organic Compound)

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet