

Safety Data Sheet

according to UK REACH Regulation

H-D-Glu(OBzl)-OtBu*HCl

Revision date: 02.08.2019

Product code: HAA1023

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

H-D-Glu(OBzl)-OtBu*HCl

Further trade names

D-Glutamic acid alpha-t-butyl gamma-benzyl ester hydrochloride

CAS No: 90159-60-7

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Laboratory chemical. Manufacture of the substance

Uses advised against

Do not use for private purposes (household).

1.3. Details of the supplier of the safety data sheet

Company name:	Iris Biotech GmbH	
Street:	Adalbert-Zoellner-Straße 1	
Place:	D-95615 Marktredwitz, Germany	
Post-office box:	568	
	D-95605 Marktredwitz, Germany	
Telephone:	+49 9231 97121 0	Telefax: +49 9231 97121 99
e-mail:	info@iris-biotech.de	
Contact person:	Compliance Department	Telephone: +49 9231 97121 0
e-mail:	sds@iris-biotech.de	
Internet:	www.iris-biotech.de	
Responsible Department:	Only available during office hours.	

1.4. Emergency telephone number:

+49 (0)89 19240 (POISON CENTER Munich: 24 h)

Further Information

Emergency telephone: 24 h

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

Hazard categories:

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2A

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

2.2. Label elements**GB CLP Regulation****Hazard components for labelling**

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Signal word: Warning

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Pictograms:

Hazard statements

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Additional advice on labelling

Warning - substance not yet tested completely.

2.3. Other hazards

This substance does not meet the criteria for classification as PBT or vPvB.

SECTION 3: Composition/information on ingredients
3.1. Substances
Chemical characterization

D-Glutamic acid alpha-t-butyl gamma-benzyl ester hydrochloride

 Sum formula: C₁₆H₂₃NO₄*HCl

Molecular weight: 329,82 g/mol

Hazardous components

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	GHS Classification	
90159-60-7	H-D-Glu(OBzl)-OtBu*HCl	100 %
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2A, STOT SE 3; H302 H315 H319 H335	

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
90159-60-7		H-D-Glu(OBzl)-OtBu*HCl	100 %
		oral: ATE = 500 mg/kg	

SECTION 4: First aid measures
4.1. Description of first aid measures
General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

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In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person or a person with cramps.

In all cases of doubt, or when symptoms persist, seek medical advice.

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

No data available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Water spray. alcohol resistant foam. Dry extinguishing powder. Carbon dioxide (CO₂). Sand.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to the escape of irritating gases and vapours.

In case of fire may be liberated: Carbon dioxide (CO₂). Carbon monoxide (CO). Nitrogen oxides (NO_x).

Hydrogen chloride (HCl)

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Usual measures for fire prevention.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****General measures**

Provide adequate ventilation. Avoid breathing dust/fume/gas/mist/vapours/spray.

Avoid contact with skin, eyes and clothes.

Wear personal protection equipment.

In case of fire: Evacuate area.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil.

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up**Other information**

Take up mechanically, placing in appropriate containers for disposal. Avoid dust formation.

Clear contaminated areas thoroughly.

6.4. Reference to other sections

Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage

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7.1. Precautions for safe handling**Advice on safe handling**

Provide adequate ventilation.
Avoid dust formation. Avoid breathing dust/fume/gas/mist/vapours/spray.
Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Avoid contact with skin, eyes and clothes. Provide adequate ventilation. When using do not eat, drink or smoke. Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place.
Handle and store contents under inert gas. Protect from moisture.
storage temperature: +2°C to +8°C

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Additional advice on limit values**

To date, no national critical limit values exist.

8.2. Exposure controls**Appropriate engineering controls**

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear eye/face protection.

Hand protection

Wear suitable gloves.

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

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

Physical state:	solid
Colour:	white / beige
Odour:	No data available

Changes in the physical state

Melting point/freezing point:	No data available
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Boiling point or initial boiling point and boiling range:	No data available
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
Flash point:	No data available
Flammability	
Solid/liquid:	No data available
Gas:	No data available
Explosive properties	
No data available	
Lower explosion limits:	No data available
Upper explosion limits:	No data available
Auto-ignition temperature:	No data available
Self-ignition temperature	
Solid:	No data available
Gas:	No data available
Decomposition temperature:	No data available
pH-Value:	No data available
Viscosity / dynamic:	not applicable
Viscosity / kinematic:	not applicable
Flow time:	not applicable
Water solubility:	No data available
Solubility in other solvents	
No data available	
Partition coefficient n-octanol/water:	No data available
Vapour pressure:	No data available
Density:	No data available
Bulk density:	No data available
Relative vapour density:	not applicable

9.2. Other information**Information with regard to physical hazard classes**

Sustaining combustion: No data available

Other safety characteristics

Solvent separation test: No data available

Solvent content: No data available

Evaporation rate: not applicable

Further Information

No data available

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

No data available

10.2. Chemical stability

The product is under normal ambient conditions (room temperature) chemically stable.

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10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoidProtect from moisture.
Keep away from heat.**10.5. Incompatible materials**

Oxidizing agents, strong.

10.6. Hazardous decomposition productsThermal decomposition can lead to the escape of irritating gases and vapours.
In case of fire may be liberated: Carbon dioxide (CO₂). Carbon monoxide (CO). Nitrogen oxides (NO_x).
Hydrogen chloride (HCl).**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in GB CLP Regulation****Toxicokinetics, metabolism and distribution**

No data available

Acute toxicity

Harmful if swallowed.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
90159-60-7	H-D-Glu(OBzl)-OtBu*HCl				
	oral	ATE 500 mg/kg			

Irritation and corrosivityCauses skin irritation.
Causes serious eye irritation.**Sensitising effects**

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproductionBased on available data, the classification criteria are not met.
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.**STOT-single exposure**

May cause respiratory irritation. (H-D-Glu(OBzl)-OtBu*HCl)

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

No data available

Practical experience

No data available

Further information

Warning - substance not yet tested completely.

SECTION 12: Ecological information**12.1. Toxicity**

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No data available

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This substance does not meet the criteria for classification as PBT or vPvB.

12.7. Other adverse effects

Warning - substance not yet tested completely.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

Dispose of waste according to applicable legislation.

Consult the appropriate local waste disposal expert about waste disposal.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)****14.2. UN proper shipping name:**

No dangerous good in sense of these transport regulations.

Inland waterways transport (ADN)**14.2. UN proper shipping name:**

No dangerous good in sense of these transport regulations.

Marine transport (IMDG)**14.2. UN proper shipping name:**

No dangerous good in sense of these transport regulations.

Air transport (ICAO-TI/IATA-DGR)**14.2. UN proper shipping name:**

No dangerous good in sense of these transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No data available

14.7. Maritime transport in bulk according to IMO instruments

not applicable

Other applicable information

No data available

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information****Additional information**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

National regulatory information

Water hazard class (D): 3 - highly hazardous to water

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15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information**Relevant H and EUH statements (number and full text)**

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Further Information

Warning - substance not yet tested completely.

The product is intended for research, analysis and scientific education.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.