according to Regulation (EC) No 1907/2006

H2N-PEG(3)-N3

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

H2N-PEG(3)-N3

Further trade names

1-Amino-11-azido-3,6,9-trioxaundecane, 2-{2-[2-(2-Azidoethoxy)ethoxy]ethoxy}ethylamine, O-(2-Aminoethyl)-O'-(2-azidoethyl)diethylene glycol 2-(2-(2-(2-(2-Azidoethoxy)ethoxy)ethoxy)ethoxy)ethan-1-amine Azido-PEG(3)-amine CAS No: 134179-38-7 EC No: 629-285-5

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

Use of the substance/mixture

Manufacture of the substance. Laboratory chemical.

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	+49 (0)89 19240 (POISON CENTEF	R Munich: 24 h)
number:		

Further Information

Emergency telephone: 24 h

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin Corr. 1B; H314

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Signal word:

Pictograms:





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Hazard statements

H314

Causes severe skin burns and eye damage.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P363	Wash contaminated clothing before reuse.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310	Immediately call a POISON CENTER/doctor.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P405	Store locked up.
P501	Dispose of contents/container to an approved disposal site.
امليتهم ممانياهم امتيم الما	

Additional advice on labelling

Warning - substance not yet tested completely.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical characterization

2-(2-(2-(2-Azidoethoxy)ethoxy)et	hoxy)ethan-1-amine
Sum formula:	C8H18N4O3
Molecular weight:	218,25

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
134179-38-7	H2N-PEG(3)-N3		<= 100 %	
	629-285-5			
	Skin Corr. 1B; H314	-		

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air. Medical treatment necessary. 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

Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. After contact with skin, wash immediately with plenty of water and soap. Immediately remove any wetted clothing, shoes or stockings.

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

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk. Rinse mouth thoroughly with water. Do NOT induce vomiting.

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 information 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

Co-ordinate fire-fighting measures to the fire surroundings. 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

Non-flammable. 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 (NOx).

5.3. Advice for firefighters

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

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Usual measures for fire prevention.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. 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 surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the



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recovered material as prescribed in the section on waste disposal. Take up mechanically, placing in appropriate containers for disposal. Avoid dust formation. Clear contaminated areas thoroughly.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13 Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. 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

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink. 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. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Keep container tightly closed in a cool, well-ventilated place.

Handle and store contents under inert gas. Protect from moisture. Reacts with : Carbon dioxide (CO2).

storage temperature: -20 °C

Hints on joint storage

No special measures are necessary.

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

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

Individual protection measures, such as personal protective equipment



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Eye/face protection

Suitable eye protection: goggles. Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. 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. 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. Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Environmental exposure controls

Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	colourless	
Odour:	No data available	
Changes in the physical state		
Melting point/freezing point:		not determined
Boiling point or initial boiling point ar	nd	not determined
boiling range:		
Sublimation point:		not determined
Softening point:		not determined
Pour point:		not determined
Flash point:		not determined
Flammability		
Solid/liquid:		not applicable
Gas:		not applicable
Explosive properties		
No data available		
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Auto-ignition temperature:		No data available
Self-ignition temperature		
Solid:		not applicable
Gas:		not applicable
Decomposition temperature:		not determined
pH-Value:		not determined
Viscosity / dynamic:		not determined



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Viscosity / kinematic:	not determined	
Flow time:	not determined	
Water solubility:	easily soluble	
Solubility in other solvents No data available		
Partition coefficient n-octanol/water:	not determined	
Vapour pressure:	not determined	
Density (at 20 °C):	No data available	
Relative vapour density:	not determined	
9.2. Other information		
Information with regard to physical hazard class		
Sustaining combustion:	No data available	
Oxidizing properties Not oxidising.		
Other safety characteristics		
Solvent separation test:	No data available	
Solvent content:	No data available	
Solid content:	not applicable	
Evaporation rate:	not determined	
Further Information		

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.

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

Protect from moisture. Keep away from heat.

10.5. Incompatible materials

Oxidizing agents, strong.

10.6. Hazardous decomposition products

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 (NOx).

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicocinetics, metabolism and distribution

No data available

Acute toxicity

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

Irritation and corrosivity



according to Regulation (EC) No 1907/2006

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Causes severe skin burns and eye damage.

Causes serious eye damage.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Based 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

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

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

Additional information on tests

Classification according to Regulation (EC) No 1272/2008 [CLP]: Health hazard properties

Practical experience

No data available

Further information

RTECS: No data available

Warning - substance not yet tested completely.

SECTION 12: Ecological information

12.1. Toxicity

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 PBT/vPvB criteria of REACH, annex XIII.

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

No information available.

Warning - substance not yet tested completely.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1. Waste treatment methods



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Disposal recommendations

Dispose of waste according to applicable legislation. Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal. Handle contaminated packages in the same way as the substance itself.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN2735
14.2. UN proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S.
	(1-Amino-11-azido-3,6,9-trioxaundecane)
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
Hazard label:	8
	8
Classification code:	C7
Special Provisions:	274
Limited quantity:	5 L
Transport category:	3
Hazard No:	80
Tunnel restriction code:	F
Other applicable information (land transpo	_ ort)
E1	- 7
Inland waterways transport (ADN)	
<u>14.1. UN number or ID number:</u>	UN2735
14.2. UN proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S.
14.2. On proper empty name.	(1-Amino-11-azido-3,6,9-trioxaundecane)
<u>14.3. Transport hazard class(es):</u>	8
14.4. Packing group:	
Hazard label:	8
	- Â
Classification code:	C7
Special Provisions:	274
Limited quantity:	5 L
Other applicable information (inland water	rways transport)
E1	
Marine transport (IMDG)	
14.1. UN number or ID number:	UN2735
14.2. UN proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S.
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
Hazard label:	8
	8
	▼ ′



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Marine pollutant:	no	
Special Provisions:	223, 274	
Limited quantity:	5 L	
EmS:	F-A, S-B	
Other applicable information (marine tran E1	nsport)	
Air transport (ICAO-TI/IATA-DGR)		
14.1. UN number or ID number:	UN2735	
14.2. UN proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (1-Amino-11-azido-3,6,9-trioxaundecane)	
14.3. Transport hazard class(es):	8	
14.4. Packing group:	III	
Hazard label:	8	
Special Provisions:	A3	
Limited quantity Passenger:	1L	
IATA-packing instructions - Passenger:	852	
IATA-max. quantity - Passenger:	5 L	
IATA-packing instructions - Cargo:	856	
IATA-max. quantity - Cargo:	60 L	
Other applicable information (air transpo	rt)	
E1		
: Y841		
14.5. Environmental hazards		
ENVIRONMENTALLY HAZARDOUS:	Νο	
14.6. Special precautions for user		
No data available		
	MO instrumente	
14.7. Maritime transport in bulk according to not applicable	ino instruments	
SECTION 15: Regulatory information		
	ations/legislation specific for the substance or mixture	
EU regulatory information		
Restrictions on use (REACH, annex XVII):		
Entry 3		
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)	
Additional information		
Safety Data Sheet according to Regula	tion (EC) No. 1907/2006 (REACH)	
National regulatory information		
Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juven work protection guideline' $(04/22/EC)$	ile
Water hazard class (D):	work protection guideline' (94/33/EC). 3 - highly hazardous to water	
15.2. Chemical safety assessment		
For this substance a chemical safety as	ssessment has not been carried out.	

SECTION 16: Other information



according to Regulation (EC) No 1907/2006

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Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)

H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

Further Information

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