

**Safety Data Sheet**

according to UK REACH Regulation

**PyBOP**

Revision date: 17.08.2021

Product code: RL-2005

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

PyBOP

**Further trade names**

Benzotriazol-1-yl-oxy-tris-pyrrolidino-phosphonium hexafluorophosphat  
Benzotriazole-1-yl-oxy-tris-pyrrolidino-phosphonium hexafluorophosphate  
(Benzotriazol-1-yloxy)tripyrrolidinophosphonium hexafluorophosphate  
PYBOP hexafluorophosphate  
Phosphorus(1+), [1-(hydroxy-O)-1H-benzotriazolato]tri-1-pyrrolidinyl-, (T-4)-, hexafluorophosphate(1-) (1:1)

Substance name: Benzotriazole-1-yl-oxy-tris-pyrrolidino-phosphonium hexafluorophosphate  
(PyBOP)

REACH Registration Number: 01-2120823727-49-XXXX

CAS No: 128625-52-5

EC No: 60-329-0

**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).

Restrictions on use: Pharmaceutical substance

**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)

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

Hazard categories:

Acute toxicity: Acute Tox. 4

Respiratory or skin sensitisation: Skin Sens. 1

Hazardous to the aquatic environment: Aquatic Acute 1

Hazardous to the aquatic environment: Aquatic Chronic 1

Hazard Statements:

Harmful if swallowed.

May cause an allergic skin reaction.

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

**2.2. Label elements**

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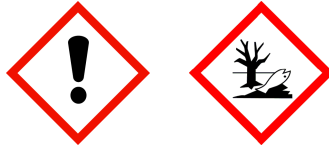
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**GB CLP Regulation**
**Signal word:** Warning

**Pictograms:**

**Hazard statements**

H302 Harmful if swallowed.  
 H317 May cause an allergic skin reaction.  
 H410 Very toxic to aquatic life with long lasting effects.

**Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P272 Contaminated work clothing should not be allowed out of the workplace.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
 P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  
 P302+P352 IF ON SKIN: Wash with plenty of water.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P501 Dispose of contents/container to an approved disposal site.

**Additional advice on labelling**

Warning - substance not yet tested completely.

**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**
**3.1. Substances**
**Chemical characterization**

Benzotriazole-1-yl-oxy-tris-pyrrolidino-phosphonium hexafluorophosphate

 Sum formula: C<sub>18</sub>H<sub>28</sub>N<sub>6</sub>O<sup>+</sup>PF<sub>6</sub><sup>-</sup>

Molecular weight: 375,43\*144,96 g/mol

**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
128625-52-5	Benzotriazole-1-yl-oxy-tris-pyrrolidino-phosphonium hexafluorophosphate (PyBOP)			100 %
	60-329-0		01-2120823727-49-XXXX	
	Acute Tox. 4, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H302 H317 H400 H410			

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		
128625-52-5	60-329-0	Benzotriazole-1-yl-oxy-tris-pyrrolidino-phosphonium hexafluorophosphate (PyBOP)	100 %
	inhalation: Data lacking (gases); dermal: Data lacking; oral: LD50 = <300 - >2000 mg/kg		

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**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).

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

**After inhalation**

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

**After contact with skin**

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. After contact with skin, wash immediately with plenty of water and soap.

**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist. In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

**After ingestion**

Medical treatment necessary. 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**

Refer to chapter 11.

**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 (CO<sub>2</sub>). 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 (CO<sub>2</sub>). Carbon monoxide (CO). Nitrogen oxides (NO<sub>x</sub>).

Phosphorus oxides. Fluorhydric acid.

**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 measures**

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

Avoid contact with skin, eyes and clothes.

Wear personal protection equipment.

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In case of fire: Evacuate area.

**For non-emergency personnel**

Take up carefully when dry.

**For emergency responders**

Take up mechanically, placing in appropriate containers for disposal. Take up dust-free and set down dust-free.

**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****For cleaning up**

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

**Other information**

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. Avoid dust formation. Do not breathe dust. 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, drink, smoke, sniff. Avoid contact with skin, eyes and clothes.

Provide adequate ventilation. 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 container tightly closed in a cool, well-ventilated place.

Handle and store contents under inert gas. Protect from moisture.

Protect from sunlight. Sensitivity to light.

May cause decomposition by long-term light influence.

storage temperature: +2°C - +8°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**

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**Additional advice on limit values**

Contains no substances with occupational exposure limit values.

**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.

Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**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.

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

**Skin protection**

Use of 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.

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**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:	solid
Colour:	white/ whitish
Odour:	No data available
Odour threshold:	not determined

**Test method****Changes in the physical state**

Melting point/freezing point: 150 (decomposition) °C OECD 102

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Boiling point or initial boiling point and boiling range:	not applicable
Sublimation point:	not determined
Softening point:	not determined
Flash point:	not applicable
<b>Flammability</b>	
Solid/liquid:	not applicable
Gas:	not applicable
<b>Explosive properties</b>	
The product is not: Explosive.	
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined
<b>Self-ignition temperature</b>	
Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	150 °C
<b>Oxidizing properties</b>	
UN Test O.1: Test for oxidising solids Not oxidising.	
GHS/CLP criteria are not met.	
pH-Value:	not determined
Viscosity / dynamic:	not applicable
Viscosity / kinematic:	not applicable
Flow time:	not applicable
Water solubility: (at 20 °C)	0,7182 g/L OECD 105
<b>Solubility in other solvents</b>	
No data available	
Dissolution rate:	not determined
Partition coefficient n-octanol/water:	Log Kow (Log Pow): -0.3 (26 °C) OECD 107
Dispersion stability:	not determined
Vapour pressure:	not applicable
Density (at 20 °C):	1,438 g/cm <sup>3</sup> OECD 109
Bulk density:	No data available
Relative vapour density:	not determined

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

Sustaining combustion: No data available

**Other safety characteristics**

Solid content: not determined

Evaporation rate: not determined

**Further Information**
**SECTION 10: Stability and reactivity**

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**10.1. Reactivity**

Product is not dust explosive in its original delivery form. The addition of particulate matter, however, results in a dust explosion risk.

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

No data available

**10.4. Conditions to avoid**

Protect from moisture. Moisture-sensitive.  
 Keep away from heat.  
 Protect from direct sunlight. Sensitivity to light.

**10.5. Incompatible materials**

Violent reaction with: 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 (CO<sub>2</sub>). Carbon monoxide (CO). Nitrogen oxides (NO<sub>x</sub>).  
 Fluorhydric acid. Phosphorus oxides.

**Further information**

In case of fire: See chapter 5.

**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
128625-52-5	Benzotriazole-1-yl-oxy-tris-pyrrolidino-phosphonium hexafluorophosphate (PyBOP)				
	oral	LD50 <300 - >2000 mg/kg	Rat	ECHA	OECD 423
	dermal	Data lacking			
	inhalation	Data lacking			

**Irritation and corrosivity**

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

Skin corrosion/irritation:

Skin - EPISKIN Human Skin Model Test

Result: No skin irritation

OECD 439

Serious eye damage/eye irritation:

eyes: In vitro eye test

Result: No eye irritation

OECD 492

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**Sensitising effects**

May cause an allergic skin reaction. (Benzotriazole-1-yl-oxy-tris-pyrrolidino-phosphonium hexafluorophosphate (PyBOP))

Respiratory or skin sensitisation:

In Chemico Skin Sensitisation: Direct Peptide Reactivity Assay (DPRA)

Result: positive.

OECD 442C

In-vitro-Test:

Result: positive.

OECD 442D

**Carcinogenic/mutagenic/toxic effects for reproduction**

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

Germ cell mutagenicity:

Ames test negative.

Escherichia coli/ Salmonella typhimurium

OECD 471 (Ames test)

**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**

No data available

**Practical experience**

No data available

**11.2. Information on other hazards****Endocrine disrupting properties**

No data available

**Other information**

No data available

**Further information**

This substance is classified as hazardous according to Regulation (EC) No 1272 (2008).

RTECS: No data available

Fluoride ion can reduce serum calcium levels possibly causing fatal hypocalcemia.

Caution! To the best of our knowledge the toxicological properties of this material have not been thoroughly investigated. Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

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

Very toxic to aquatic life with long lasting effects.



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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
128625-52-5	Benzotriazole-1-yl-oxy-tris-pyrrolidino-phosphonium hexafluorophosphate (PyBOP)					
	Acute algae toxicity	ErC50 mg/l	2,54	72 h	Pseudokirchneriella subcapitata	ECHA OECD 201
	Acute crustacea toxicity	EC50 mg/l	0,25	48 h	Daphnia magna (Big water flea)	ECHA OECD 202

#### 12.2. Persistence and degradability

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
128625-52-5	Benzotriazole-1-yl-oxy-tris-pyrrolidino-phosphonium hexafluorophosphate (PyBOP)				
	Biodegradability: aerobic.	0 %	28	OECD 301F	
	Not readily biodegradable (according to OECD criteria)				

#### 12.3. Bioaccumulative potential

##### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
128625-52-5	Benzotriazole-1-yl-oxy-tris-pyrrolidino-phosphonium hexafluorophosphate (PyBOP)	-0,3

#### 12.4. Mobility in soil

No data available

#### 12.5. Results of PBT and vPvB assessment

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.

#### 12.6. Endocrine disrupting properties

No data available

#### 12.7. Other adverse effects

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.  
 Avoid release to the environment.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Dispose of waste according to applicable legislation.  
 Consult the appropriate local waste disposal expert about waste disposal.

##### Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself. 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:** UN 3077

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**14.2. UN proper shipping name:**

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 (Benzotriazole-1-yl-oxy-tris-pyrrolidino-phosphonium  
 hexafluorophosphate (PyBOP))

**14.3. Transport hazard class(es):**

9

**14.4. Packing group:**

III

Hazard label:

9



Classification code:

M7

Special Provisions:

274 335 375 601

Limited quantity:

5 kg

Excepted quantity:

E1

Transport category:

3

Hazard No:

90

Tunnel restriction code:

-

**Inland waterways transport (ADN)**
**14.1. UN number or ID number:**

UN 3077

**14.2. UN proper shipping name:**

 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
 (Benzotriazole-1-yl-oxy-tris-pyrrolidino-phosphonium  
 hexafluorophosphate (PyBOP))

**14.3. Transport hazard class(es):**

9

**14.4. Packing group:**

III

Hazard label:

9



Classification code:

M7

Special Provisions:

274 335 375 601

Limited quantity:

5 kg

Excepted quantity:

E1

**Marine transport (IMDG)**
**14.1. UN number or ID number:**

UN 3077

**14.2. UN proper shipping name:**

 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
 (Benzotriazole-1-yl-oxy-tris-pyrrolidino-phosphonium  
 hexafluorophosphate (PyBOP))

**14.3. Transport hazard class(es):**

9

**14.4. Packing group:**

III

Hazard label:

9



Special Provisions:

274, 335, 966, 967, 969

Limited quantity:

5 kg

Excepted quantity:

E1

EmS:

F-A, S-F

**Air transport (ICAO-TI/IATA-DGR)**
**14.1. UN number or ID number:**

UN 3077

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**14.2. UN proper shipping name:**ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(Benzotriazole-1-yl-oxy-tris-pyrrolidino-phosphonium  
hexafluorophosphate (PyBOP))**14.3. Transport hazard class(es):**

9

**14.4. Packing group:**

III

Hazard label:

9



Special Provisions:

A97 A158 A179 A197 A215

Limited quantity Passenger:

30 kg G

Passenger LQ:

Y956

Excepted quantity:

E1

IATA-packing instructions - Passenger:

956

IATA-max. quantity - Passenger:

400 kg

IATA-packing instructions - Cargo:

956

IATA-max. quantity - Cargo:

400 kg

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS:

Yes



Danger releasing substance:

Benzotriazole-1-yl-oxy-tris-pyrrolidino-phosphonium hexafluorophosphate  
(PyBOP)**14.6. Special precautions for user**

No data available

**14.7. Maritime transport in bulk according to IMO instruments**

not applicable

**Other applicable information**EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings  
containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**Information according to 2012/18/EU  
(SEVESO III):

E1 Hazardous to the Aquatic Environment

**Additional information**

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

**National regulatory information**

Employment restrictions:

Observe restrictions to employment for juveniles according to the  
'juvenile work protection guideline' (94/33/EC).

Water hazard class (D):

3 - highly hazardous to water

Skin resorption/Sensitization:

Causes allergic hypersensitivity reactions.

**15.2. Chemical safety assessment**

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

**SECTION 16: Other information**

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**Abbreviations and acronyms**

CLP: Classification, labelling and Packaging  
REACH: Registration, Evaluation and Authorization of Chemicals  
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals  
UN: United Nations  
CAS: Chemical Abstracts Service  
DNEL: Derived No Effect Level  
DMEL: Derived Minimal Effect Level  
PNEC: Predicted No Effect Concentration  
ATE: Acute toxicity estimate  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%  
LL50: Lethal loading, 50%  
EL50: Effect loading, 50%  
EC50: Effective Concentration 50%  
ErC50: Effective Concentration 50%, growth rate  
NOEC: No Observed Effect Concentration  
BCF: Bio-concentration factor  
PBT: persistent, bioaccumulative, toxic  
vPvB: very persistent, very bioaccumulative  
ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Regulations concerning the international carriage of dangerous goods by rail  
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)  
IMDG: International Maritime Code for Dangerous Goods  
EmS: Emergency Schedules  
MFAG: Medical First Aid Guide  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organization  
MARPOL: International Convention for the Prevention of Marine Pollution from Ships  
IBC: Intermediate Bulk Container  
SVHC: Substance of Very High Concern  
For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

**Relevant H and EUH statements (number and full text)**

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

**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.

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