

# Birol

Version: XII

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## Safety Data Sheet

legal basis:

Commission regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

#### 1.1. Product identifier

Trade name: Birol  
Identifier: Contains:,Toluene,Acetone,Ethyl acetate  
Product code: 505580  
UFI Code: 9V31-F01H-Q001-DQW9  
Composition for label/Other name(s) Thinner.,

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

##### Identified uses

##### Industrial uses:

use in coatings, use in cleaning agents

##### Professional uses:

use in coatings, use in cleaning agents

##### Uses:

Thinner.

##### Uses advised against:

other than named above

#### 1.3. Details of the supplier of the safety data sheet

Name and address: Brenntag Polska Sp.z o.o  
ul. Bema 21, 47-224 Kędzierzyn-Koźle  
Poland  
Phone number: (48/77) 4721500  
Fax number: (48/77) 4721600  
e-mail address for a competent person responsible for the safety data sheet: kch@brenntag.pl

#### 1.4. Emergency telephone number

998 or 112, or contact with the nearest local Fire Department

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### General hazards

This product is classified as hazardous according to current regulations

##### Health hazards

Asp. Tox. 1	Aspiration hazard, Category 1	H304 May be fatal if swallowed and enters airways
Skin Irrit. 2	Skin irritation, Category 2	H315 Causes skin irritation
Eye Irrit. 2	Eye irritation, Category 2	H319 Causes serious eye irritation
Repr. 2	Reproductive toxicity, Category 2	H361d Suspected of damaging the unborn child
STOT SE 3	Specific target organ toxicity — single exposure, Category 3	H336 May cause drowsiness or dizziness
STOT RE 2	Specific target organ toxicity — repeated exposure, Category 2	H373 May cause damage to organs through prolonged or repeated exposure
		(central nervous system)

##### Physical hazards

Flam. Liq. 2	Flammable liquid, Category 2	H225 Highly flammable liquid and vapour
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##### Environmental hazards

not applicable

#### 2.2. Label elements

Hazard pictograms:

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**Signal Word:**

Danger

**Hazard statements:**

H225 Highly flammable liquid and vapour  
 H304 May be fatal if swallowed and enters airways  
 H315 Causes skin irritation  
 H319 Causes serious eye irritation  
 H336 May cause drowsiness or dizziness  
 H361d Suspected of damaging the unborn child  
 H373 May cause damage to organs through prolonged or repeated exposure (central nervous system)

**Precautionary statements:**

P202 Do not handle until all safety precautions have been read and understood  
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/...  
 P331 Do NOT induce vomiting  
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

**2.3. Other hazards**

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).  
 This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

Concentration value	Substance	CAS	EC	Index number	REACH registration number	Hazard class
70 - 90 %	Contains: Toluene	108-88-3	203-625-9	601-021-00-3	01-2119471310-51-XXXX	Flam. Liq. 2 H225 Asp. Tox. 1 H304 Skin Irrit. 2 H315 Repr. 2 H361d STOT SE 3 H336 STOT RE 2 H373 (central nervous system)
10 - 20 %	Acetone	67-64-1	200-662-2	606-001-00-8	01-2119471330-49-XXXX	Flam. Liq. 2 H225 Eye Irrit. 2 H319 STOT SE 3 H336 EUH066
5 - 7 %	Ethyl acetate	141-78-6	205-500-4	607-022-00-5	01-2119475103-46-XXXX	Flam. Liq. 2 H225 Eye Irrit. 2 H319 STOT SE 3 H336 EUH066

**Remarks**

See Section 16 for the full text of the H statements

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

**Inhalation**

Ensure medical assistance. Move the victim to fresh air. Lie the victim down in the position comfortable for breathing. Keep warm and in a quiet place. In case of shortness of breath, give oxygen by trained personnel. If breathing is irregular or stopped, administer artificial respiration.

**Skin contact**

Remove all contaminated clothing. Wash off with soap and plenty of water. If any symptoms occur ensure medical aid.

**Eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. If any symptoms occur consult with a physician.

**Ingestion**

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Immediately ensure medical aid. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Administer liquid paraffin. Do not give milk, alcoholic beverages or castor oil. Never give anything by mouth to an unconscious person.

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

#### Symptoms and effects of exposure

##### Inhalation

narcosis, effect on central nervous system, abnormal coordination of movements, drowsiness, cardiac arrhythmia, loss of consciousness

##### Skin contact

reddening, pain, oedema, skin irritation, in case of prolonged exposure, drying, cracking, inflammation

##### Eye contact

lacrimation, reddening, stinging, oedema, eye irritation

##### Ingestion

In case of aspiration can cause chemical pneumonia.

### 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 jet, water mist, alcohol-resistant foam, extinguishing powder. carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

Do not use water jet.

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

Vapors form explosive mixtures with air. Vapors are heavier than air and may spread and accumulate above the ground. Vapors may pose the hazard of fire and return of the flame to the source of leakage. Closed containers exposed to fire or high temperatures may explode due to increase of the internal pressure .

Fire may produce: carbon oxides.

### 5.3. Advice for firefighters

Containers exposed to fire or high temperature cool by spraying water from a safe distance.

Wear self-contained breathing apparatus and full protective clothing.

## SECTION 6: Accidental release measures

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

Inform surroundings about the accident. Prevent unauthorised persons entering the danger zone. Avoid contact with released product. Avoid breathing vapour/fog/aerosol. Ensure adequate ventilation. Use personal protective equipment. Remove all sources of ignition. Do not use sparking tools.

### 6.2. Environmental precautions

Prevent from entering the sewerage system, watercourses and soil. In case of environment contamination, inform appropriate services.

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

Dilute vapours with dispersed water jets.

Eliminate spillage if possible. Place damaged packages in a protective container.

Large spills should be collected mechanically (remove by pumping) for disposal.

Collect with a non-combustible sorption material. Pick up and transfer to properly labelled containers. Transfer for disposal.

### 6.4. Reference to other sections

More information about suitable personal protective equipment is given in section 8 .

Dispose of in accordance with the recommendations given in Section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid eyes, skin and clothing contamination. Do not breathe vapours/mist/aerosol. Ensure suitable ventilation. Use personal protective equipment, Smoking, eating and drinking should be prohibited in the application area. Wash hands before every break and after work. Remove and wash contaminated clothing before re-use. Eliminate all source of ignition. Do not use sparking tools. Use EX equipment. Take precautionary measures against static discharges. Use proper bonding and/or ground procedures. Do NOT use compressed air for filling, discharging, or handling. Open drum carefully as content may be under pressure. Empty containers may contain residues of product and should be handled with caution. No cutting, drilling, grinding and/or welding is allowed on containers/tanks which have not been cleaned.

### 7.2. Conditions for safe storage, including any incompatibilities

Store in a warehouse with explosion protection light system. Keep containers tightly closed in a dry, cool and well-ventilated place. Storage containers should be earthed and bonded. Protect from direct sunlight. Keep away from heat, flame sparks and other ignition sources. Store away from incompatible materials (see section 10 of MSDS).

### 7.3. Specific end use(s)

See section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

DNEL value

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Toluene	DNEL value	for workers	through skin contact	Long-term exposure	Systemic effects	384 mg/kg bw/day
	DNEL value	for workers	by inhalation	Long-term exposure	Systemic effects	192 mg/m <sup>3</sup>
	DNEL value	for workers	by inhalation	Long-term exposure	Local effects	192 mg/m <sup>3</sup>
	DNEL value	for workers	by inhalation	acute exposure	Systemic effects	384 mg/m <sup>3</sup>
	DNEL value	for consumers	through skin contact	Long-term exposure	Systemic effects	226 mg/kg
	DNEL value	for consumers	by inhalation	Long-term exposure	Systemic effects	56,5 mg/m <sup>3</sup>
	DNEL value	for consumers	after ingestion	Long-term exposure	Systemic effects	8,13 mg/kg
	DNEL value	for consumers	by inhalation	acute exposure	Local effects	226 mg/m <sup>3</sup>

Acetone	DNEL value	for workers	by inhalation	acute exposure		2 420 mg/m <sup>3</sup>
	DNEL value	for workers	through skin contact	Long-term exposure		186 mg/kg bw/day
	DNEL value	for workers	by inhalation	Long-term exposure		1 210 mg/m <sup>3</sup>
	DNEL value	for consumers	through skin contact	Long-term exposure		62 mg/kg bw/day
	DNEL value	for consumers	by inhalation	Long-term exposure		200 mg/m <sup>3</sup>
	DNEL value	for consumers	after ingestion	Long-term exposure		62 mg/kg bw/day

Ethyl acetate	DNEL value	for workers	through skin contact			63 mg/kg bw/day
	DNEL value	for workers	through skin contact			37 mg/kg bw/day
	DNEL value	for general population	by inhalation			734 mg/m <sup>3</sup>
	DNEL value	for general population	by inhalation			734 mg/m <sup>3</sup>
	DNEL value	for general population	after ingestion			4,5 mg/kg bw/day

### PNEC value

Toluene	PNEC value	Fresh water	0,68 mg/l
	PNEC value	Marine water	0,68 mg/l
	PNEC value	Soil	2,89 mg/kg
	PNEC value	Sediment	16,39 mg/kg
	PNEC value	Sewage treatment plant (STP)	13,61 mg/kg

Acetone	PNEC value	Fresh water	10,6 mg/l
	PNEC value	Marine water	1,06 mg/l
	PNEC value	Sediment (Fresh water)	30,4 mg/kg
	PNEC value	Sediment (Marine water)	30,4 mg/kg
	PNEC value	Soil	29,5 mg/kg
	PNEC value	Sewage treatment plant (STP)	100 mg/l

Ethyl acetate	PNEC value	Fresh water	0,26 mg/l
	PNEC value	Sediment (Fresh water)	1,25 mg/kg
	PNEC value	Soil	0,24 mg/kg
	PNEC value	Sewage treatment plant (STP)	650 mg/l

### Occupational exposure limits

Toluene	Substance labeled with notation "skin"	NDS	100 mg/m <sup>3</sup>
		NDSCH	200 mg/m <sup>3</sup>

Acetone		NDS	600 mg/m <sup>3</sup>
		NDSCH	1 800 mg/m <sup>3</sup>

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Ethyl acetate	NDS	734 mg/m <sup>3</sup>
	NDSCH	1 468 mg/m <sup>3</sup>

### Comments

Poland. OELs - Regulation of the Minister of Family, Labour and Social Policy, of 12 June 2018; Journal of Laws 2018, item 1286 as amended.

labeled substance with the notation "skin" means that the absorption of substances through the skin may be just as important as by inhalation.

### Biological limit values comments

not available

### Recommended monitoring procedures

Regulation of the Minister of Health on tests and measurements applicable for hazardous substances and other adverse factors which are present in the workplace, of 2 February 2011 (Journal of Laws No33, item 166).

## 8.2.Exposure controls

### Appropriate engineering controls

General ventilation in closed areas.

Local exhaust ventilation.

Explosion proof exhaust ventilation.

### Individual protection measures

#### Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respirator with filter for organic vapour  
 In case of intensive or longer exposure use self-contained respiratory protective device.

#### Eye /face protection

Tightly fitting safety goggles

#### Skin and hand protection

Solvent-resistant gloves Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

#### Other protection equipment

Protective clothing

#### Reference to regulations

Individual protection measures should satisfy the requirements specified in the Regulation (EU) 2016/425 of the European Parliament and of the Council on basic requirements for personal protective equipment, of 9 March 2016.

#### General advice

Do not eat, drink or smoke when using this product. Wash hands before every break and at the end of workday. Remove and wash contaminated clothing before re-use. Avoid eyes, skin and clothing contamination. Avoid inhaling of vapors/gases/mist/aerosols.

#### Environ. exposure controls

Avoid release to the environment.

## SECTION 9:Physical and chemical properties

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

Physical state	liquid	
Appearance:	colorless	clear
		Odour threshold:
Odour:	no data available	no data available
Melting point/freezing point:	no data available	
Boiling point or initial boiling point and boiling range:	no data available	
Flammability:	Not applicable.	
Lower and upper explosion limit:	no data available	
Flash point:	-11 °C	
Auto-ignition temperature:	580 °C	
Decomposition temperature:	no data available	
pH:	no data available	
Kinematic viscosity:	no data available	
Solubility:	Water.	sparingly soluble

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Partition coefficient: n-octanol/water (log value):	no data available		
Vapour pressure:	no data available		
Density and/or relative density:	Density	0,850 - 0,870 g/cm <sup>3</sup>	20 °C
Relative vapour density:	no data available		
Particle characteristics:	no data available		

### 9.2. Other information

Information with regard to physical hazard classes:	no data available
Other safety characteristics:	no data available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable at normal ambient temperature and pressure.

### 10.2. Chemical stability

Stable under normal conditions. Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

Vapours may form explosive mixture with air.

### 10.4. Conditions to avoid

High temperature. Sources of ignition. Heat, flames and sparks.

### 10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Fire may produce: Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

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

#### Acute oral toxicity

Toluene	LD50	5 580 mg/kg	Rat
Acetone	LD50	5 800 mg/kg	Rat
Ethyl acetate	LD50	> 5 620 mg/kg	Rat

#### Acute dermal toxicity

Toluene	LD50	> 5 000 mg/kg	Rabbit
Acetone	LD50	7 400 mg/kg	Rabbit
Ethyl acetate	LD50	> 18 000 mg/kg bw/day	Rabbit

#### Acute inhalation toxicity

Toluene	LC50	> 20 mg/l	4 h	Rat
Acetone	LC50	76 mg/l	4 h	Rat
Ethyl acetate	LD50	> 26 mg/l		Mouse

#### Acute toxicity - other exposure routes

No data available.

#### Skin corrosion/irritation

irritant effects, based on information on ingredients

#### Serious eye damage/irritation

irritant effects, based on information on ingredients

#### Respiratory sensitisation

not sensitizing, based on information on ingredients

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### Skin sensitisation

not sensitizing, based on information on ingredients

### Germ cell mutagenicity

#### Summary

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

### Carcinogenicity

#### Summary

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

### Reproductive toxicity

#### Summary

Suspected of damaging the unborn child  
(based on information on ingredients)

### STOT-single exposure

#### Summary

May cause drowsiness or dizziness  
(based on information on ingredients)

### STOT-repeated exposure

#### Summary

May cause damage to organs through prolonged or repeated exposure  
Respiratory Tract  
Target Organs  
Central nervous system

### Aspiration hazard

May be fatal if swallowed and enters airways, based on information on ingredients

### Information on likely routes of exposure

Inhalation.  
Ingestion.  
Skin contact.  
Eye contact.

### Symptoms related to the physical, chemical and toxicological characteristics

Inhalation.  
cough  
breathing difficulties  
vapors may cause:  
nausea  
Headache  
dizziness  
in high concentrations  
effect on central nervous system  
abnormal coordination of movements  
drowsiness  
breathing problems  
cardiac arrhythmia  
loss of consciousness  
Ingestion.  
stomach ache  
vomiting  
The risk of aspiration into the lungs during of vomiting.  
In case of aspiration can cause chemical pneumonia.  
effect on central nervous system  
excitation  
Headache  
dizziness  
drowsiness  
nausea  
Skin contact.  
defatting  
drying  
cracking  
dermatitis  
Eye contact.  
vapors may cause:  
scorching  
tearing  
reddening

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Inhalation.  
irritation of the mucous membranes of the respiratory tract  
nose irritation  
throat irritation  
Ingestion.

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irritation of the mucous membranes of the digestive tract  
 In case of aspiration can cause chemical pneumonia.  
 Skin contact.  
 skin irritation  
 Eye contact.  
 eye irritation

### 11.2. Information on other hazards

**Other information**  
 no data available

## SECTION 12: Ecological information

### 12.1. Toxicity

Toluene	Acute toxicity to fish	LC50	24 mg/l	96 h	Lepomis macrochirus (Bluegill sunfish)	OECD Test Guideline 203	
	Acute toxicity to fish	LC50	13 mg/l	96 h	Carassius auratus (goldfish)	OECD Test Guideline 203	
	Acute toxicity to fish	LC50	6,3 mg/l	96 h	Oncorhynchus kisutch (coho salmon)	OECD Test Guideline 203	
	Acute toxicity to fish	LC50	59,3 mg/l	96 h	Poecilia reticulata	OECD Test Guideline 203	
	Acute toxicity to aquatic invertebrates	EC50	10 mg/l	48 h	Daphnia magna (Water flea)	OECD Test Guideline 201	
	Acute toxicity to aquatic plant	EC50	32 mg/l	72 h	Selenastrum capricornutum	OECD Test Guideline 201	
	Chronic toxicity to fish	LOEC	1,6 mg/l	32 days	Pimephales promelas		
	Chronic toxicity to fish	EC10	3,5 mg/l		Oncorhynchus mykiss (rainbow trout)	OECD Test Guideline 210	
	Chronic toxicity to fish	NOEC	3,1 mg/l	28 days	Morone saxatilis		
	Toxicity to microorganisms	IC50	13 mg/l	24 h	Nitrosomonas sp		fresh water static test
	Toxicity to microorganisms	EC0	391 mg/l		Tetrahymena pyriformis		fresh water static test
	Toxicity to microorganisms	IC50	520 mg/l	15 h	activated sludge, industrial		
	Toxicity to microorganisms	IC50	1 200 mg/l	48 h			
	Chronic toxicity to fish	LOEC	5,3 mg/l	28 days	Morone saxatilis		



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Acetone	Acute toxicity to aquatic invertebrates	LC50	8 800 mg/l	48 h	Daphnia pulex		
	Acute toxicity to aquatic invertebrates	LC50	2 100 mg/l	24 h	Artemia salina		
	Chronic toxicity to aquatic invertebrates	NOEC	2 212 mg/l	28 days	Daphnia magna (Water flea)		
	Acute toxicity to aquatic plant	LOEC	530 mg/l	8 days	Microcystis aeruginosa		
	Chronic toxicity to aquatic plants	NOEC	430 mg/l	96 h	Prorocentrum minimum		
	Acute toxicity to fish	LC50	5 540 mg/l	96 h	Oncorhynchus mykiss (rainbow trout)		
	Acute toxicity to fish	LC50	11 000 mg/l	96 h	Alburnus alburnus (Bleak)		
	Toxicity to terrestrial organisms	LC50	0,1 - 1 mg/cm <sup>2</sup>	48 h			

Ethyl acetate	Toxicity to fish	LC50	350 - 600 mg/l	96 h	Oncorhynchus mykiss (rainbow trout)		
	Toxicity to fish	LC50	220 - 250 mg/l	96 h	Pimephales promelas		
	Toxicity to daphnia and other aquatic invertebrates	EC50	2 300 - 3 090 mg/l	24 h	Daphnia magna (Water flea)		
	Toxicity to daphnia and other aquatic invertebrates	LC50	560 mg/l	48 h	Daphnia magna (Water flea)		
	Toxicity to algae	EC50	4 300 mg/l	24 h			
	Toxicity to algae	EC50	1 800 - 3 200 mg/l	72 h	Selenastrum capricornutum		

### 12.2.Persistence and degradability

#### Summary

Based on ingredients product is expected to rapidly biodegradable

### 12.3.Bioaccumulative potential

#### Summary

no data available

### 12.4.Mobility in soil

#### Summary

no data available

### 12.5.Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).

This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

### 12.6. Endocrine disrupting properties

no data available

### 12.7.Other adverse effects

no data available

## SECTION 13:Disposal considerations

### 13.1.Waste treatment methods

Comply with below named regulations:

Waste Disposal Law, of 14 December 2012 (Journal of Laws 2013, item 21), with further amendments.

Law on packages and spent packages, of 13 June 2013 (Journal of Laws 2013, item 888).

Regulation of the Minister of Environment on Wastes catalogue, of 9 December 2014 (Journal of Laws 2014, item 1923).

Suggested waste code: 07 01 04\* Other organic solvents, washing liquids and mother liquors.

The generation of waste should be avoided or minimised wherever possible. Do not discharge to sewage systems, to soil or to water reservoirs. Dispose of in accordance with current legislation concerning Waste disposal. No cutting, drilling, grinding and/or welding is allowed on containers/tanks which have

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not been cleaned. Waste packaging should be recycled. Packaging that can not be cleaned, should be disposed of like the product.

### SECTION 14: Transport information

#### 14.1. UN number or ID number

Transport type	UN Number
ADR	1263
RID	N/A
IMDG	N/A
ICAO	N/A
ADN	N/A

#### 14.2. UN proper shipping name

Transport type	UN proper shipping name
ADR	1263 Paint or paint related material
RID	not available
IMDG	not available
ICAO	not available
ADN	not available

#### 14.3. Transport hazard class(es)

Transport type	Transport hazard class:	Classification code:	Hazard identification number:	Tunnel restriction code:	Labels numbers:
ADR	3	F1	33	D/E	3
RID	not available				
IMDG	not available				
ICAO	not available				
ADN	not available				



#### 14.4. Packing group

Transport type	Packing group:
ADR	II
RID	not available
IMDG	not available
ICAO	not available
ADN	not available

#### 14.5. Environmental hazards

The product does not pose a hazard to the environment in accordance with the criteria of the UN Model Regulations.

#### 14.6. Special precautions for user

not available

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

not available

### SECTION 15: Regulatory information

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

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH),

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (OJ L 353, 31.12.2008, p. 1). ACT of 25 February 2011 on the chemical substances and their mixtures (Journal of Laws No. 63, item 322), with further amendments.

Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR)

Regulation (EC) No 273/2004 of the European Parliament and of the Council of 11 February 2004 on drug precursors

Council Regulation (EC) No 111/2005 of 22 December 2004 laying down rules for the monitoring of trade between the Community and third countries in drug precursors.

Law of 29 July 2005 on preventing drug addiction (Journal of Laws No. 179, poz.1485 as amended)

Regulation (EU) 2019/1148 of the European Parliament and of The Council of 20 June 2019 on the marketing and use of explosives precursors, amending Regulation (EC) No 1907/2006 and repealing Regulation (EU) No 98/2013.

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### 15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for all ingredients.

### SECTION 16: Other information

#### Changes of previous version

General revision

#### Key or legend to abbreviations and acronyms used in the safety data sheet

Ox. Liq. - Oxidising liquid  
Water-react. - Substance or mixture which in contact with water emits flammable gas  
Self-heat. - Self-heating substance or mixture  
Pyr. Sol. - Pyrophoric solid  
Pyr. Liq. - Pyrophoric liquid  
Self-react. - Self-reactive substance or mixture  
Flam. Sol. - Flammable solid  
Flam. Liq. - Flammable liquid  
Press. Gas - Gases under pressure  
Ox. Gas - Oxidising gas  
Flam. Aerosol - Flammable aerosol  
Flam. Gas - Flammable gas  
Ox. Sol. - Oxidising solid  
Org. Perox. - Organic peroxide  
Met. Corr. - Substance or mixture corrosive to metals  
Acute Tox. - Acute toxicity  
Skin Corr. - Skin corrosion  
Skin Irrit. - Skin irritation  
Resp. Sens. - Respiratory sensitization  
Skin Sens. - Skin sensitization  
Muta. - Germ cell mutagenicity  
Carc. - Carcinogenicity  
Repr. - Reproductive toxicity, Category 1A  
STOT SE - Specific target organ toxicity — single exposure  
Expl. - Explosive  
DNEL – Derived No Effect Level  
PNEC – Predicted No Effect Concentration  
PBT (Substance) persistent, bioaccumulating and toxic  
vPvB (Substance) very persistent and very bioaccumulating  
NDSP - Maximum permissible ceiling exposure level/concentration  
NDSCH - Maximum short-term exposure level/concentration  
NDS - Maximum permissible exposure level/concentration  
Lact. - Effects on or via lactation  
Ozone - Hazardous for the ozone layer  
Aquatic Chronic - Hazardous to the aquatic environment - Chronic  
Aquatic Acute - Hazardous to the aquatic environment - Acute  
Asp. Tox. - Aspiration hazard  
LD50 - Lethal dose 50; dose/amount of a substance which kills 50 % of the test population  
LC50 - Lethal concentration; concentration of a substance which kills 50 % of the test population  
LOEC - Lowest Observed Effect Concentration  
NOEL No Observed Effect Level  
NOEC - No Observed Effect Concentration  
ECX - Effective concentration; concentration of a substance which produces X % effect response  
ADR – Agreement Concerning the International Carriage of Dangerous Goods by Road  
ADN – Agreement Concerning the International Carriage of Dangerous Goods by Inland Waters  
RID – Regulations Concerning the International Carriage of Dangerous Goods by Rail  
IMDG – International Maritime Dangerous Goods Code  
ICAO/IATA – International Civil Aviation Organization/International Air Transport Association  
UVCB - Substances of Unknown or Variable composition, Complex reaction products or Biological materials  
STOT RE - Specific target organ toxicity — repeated exposure

#### Key literature references and sources for data

This safety data sheet has been prepared based on the MSDS provided by the manufacturer or / and internet databases and current regulations.

#### Advice on any training appropriate for workers to ensure protection of human health and the environment

People involved in the handling of the product should be trained in the handling, safety and hygiene. The staff / drivers should be trained and obtain proper certification in accordance with the requirements of ADR.

#### List of relevant hazard statements and/or precautionary statements

(central nervous system)

EUH066 Repeated exposure may cause skin dryness or cracking

H225 Highly flammable liquid and vapour

H304 May be fatal if swallowed and enters airways

H315 Causes skin irritation

H319 Causes serious eye irritation

H336 May cause drowsiness or dizziness

H361d Suspected of damaging the unborn child

H373 May cause damage to organs through prolonged or repeated exposure

P202 Do not handle until all safety precautions have been read and understood

## Biol

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P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/...

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P331 Do NOT induce vomiting

### Other Information

Mixture. Producer/importer confirmed compliance of substance/substance in product with REACH (Regulation EC 1907/2006)

The information contained in this safety data sheet refer to the product in the form in which it is delivered

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product in terms of safety requirements.

These data can not be considered in any case describe the product (as product specification).

Contains drug precursor.

Drug precursor cat.3

Restricted explosives precursor