

\* Ozerna Polar

Date revised: 07.05.2024

# 8770090221

Version: 11 / GB

Master No. MA-211

Print date: 08.05.2024

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

### **1.1. Product identifier**

**Trade name**

Ozerna Polar

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

**Use of the substance/mixture**

Detergents

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

**Address/Manufacturer**

BÜFA Cleaning GmbH &amp; Co. KG

August-Hanken-Str. 30

26125 Oldenburg

Telephone no. +49 441 9317 0

Fax no. +49 441 9317 100

Information provided Department product safety / +49 441 9317 108

by / telephone

E-Mail sds-cleaning@buefa.de

### **1.4. Emergency telephone number**

Poison Information Center Goettingen: +49 551 19240

## **SECTION 2: Hazards identification \*\*\***

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

**Classification (Regulation (EC) No. 1272/2008)**

Skin Irrit. 2 H315

Eye Dam. 1 H318

Skin Sens. 1A H317

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008

For explanation of abbreviations see section 16.

### **2.2. Label elements**

**Labelling according to regulation (EC) No 1272/2008****Hazard pictograms \*\*\*****Signal word**

Danger

**Hazard statements \*\*\***

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

**Precautionary statements \*\*\***

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280.2 Wear protective gloves/ eye/ face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

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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 or doctor.

**Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)**

contains \*\*\* Potassium hydroxide; Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.  
 2-Methyl-2H-isothiazol-3-one; 2-Phenoxyethanol; (R)-p-mentha-1,8-diene; Fatty acids, ethoxylated

**2.3. Other hazards**

The product contains no PBT substances. The product contains no vPvB substances. This product does not contain a substance that has endocrine disrupting properties with respect to human. The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

**SECTION 3: Composition/information on ingredients \*\*\*****3.2. Mixtures****Hazardous ingredients \*\*\*****Fatty acids, ethoxylated**

CAS No.	157627-86-6				
Concentration	>=	3	<	6,6	%
Acute Tox. 4	H302				
Eye Dam. 1	H318				
Aquatic Chronic 3	H412				

ATE	oral		1.000	mg/kg
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**Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.**

CAS No.	85536-14-7				
EINECS no.	287-494-3				
Registration no.	01-2119490234-40-XXXX				
Concentration	>=	3	<	3,4	%
Acute Tox. 4	H302				
Skin Corr. 1C	H314				
Eye Dam. 1	H318				
Aquatic Chronic 3	H412				

cATpE	oral		500	mg/kg
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**fatty alcohol alkoxyate**

Registration no.	NICHT RELEVANT (POLYMER)				
Concentration	>=	1	<	3,3	%
Acute Tox. 4	H302				
Eye Irrit. 2	H319				
Aquatic Chronic 3	H412				
Aquatic Acute 1	H400				

cATpE	oral		500	mg/kg
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**2-Phenoxyethanol**

CAS No.	122-99-6				
EINECS no.	204-589-7				
Registration no.	01-2119488943-21-XXXX				
Concentration	>=	1	<	2,6	%
Acute Tox. 4	H302				
Eye Dam. 1	H318				
STOT SE 3	H335				

ATE	oral		1.394	mg/kg
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**sodium cumenesulphonate**

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CAS No.	15763-76-5				
EINECS no.	239-854-6				
Registration no.	01-2119489411-37-XXXX				
Concentration	>=	1	<	10	%
Eye Irrit. 2	H319				

**Benzyll alcohol**

CAS No.	100-51-6				
EINECS no.	202-859-9				
Registration no.	01-2119492630-38-XXXX				
Concentration	>=	1	<	1,9	%
Acute Tox. 4	H302				
Acute Tox. 4	H332				
Eye Irrit. 2	H319				

ATE	oral	1.620	mg/kg
cATpE	inhalative, Dust/Mist	1,5	mg/l
cATpE	inhalative, Vapors	11	mg/l

**Potassium hydroxide**

CAS No.	1310-58-3				
EINECS no.	215-181-3				
Registration no.	01-2119487136-33-XXXX				
Concentration	>=	0,5	<	0,65	%
Acute Tox. 4	H302				
Skin Corr. 1A	H314				
Met. Corr. 1	H290				

Concentration limits (Regulation (EC) No. 1272/2008)

Eye Irrit. 2	H319	>= 0,5 < 2 %
Skin Corr. 1A	H314	>= 5 %
Skin Corr. 1B	H314	>= 2 < 5 %
Skin Irrit. 2	H315	>= 0,5 < 2 %

**(R)-p-mentha-1,8-diene**

CAS No.	5989-27-5				
EINECS no.	227-813-5				
Registration no.	01-2119529223-47-XXXX				
Concentration	>=	0,1	<	1	%
Aquatic Chronic 3	H412				
Aquatic Acute 1	H400				
Flam. Liq. 3	H226				
Skin Irrit. 2	H315				
Skin Sens. 1	H317				
Asp. Tox. 1	H304				

Concentration limits (Regulation (EC) No. 1272/2008)

Aquatic Acute 1	M = 1
Aquatic Chronic 1	M = 1

Additional remarks:

CLP Regulation (EC) No 1272/2008, Annex VI, Note C

**2-Methyl-2H-isothiazol-3-one**

CAS No.	2682-20-4				
EINECS no.	220-239-6				
Registration no.	01-2120764690-50-XXXX				
Concentration	>=	0,0015	<	0,01	%
Acute Tox. 3	H301				
Acute Tox. 3	H311				
Skin Sens. 1	H317				
Acute Tox. 2	H330				

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Skin Corr. 1B	H314
Aquatic Acute 1	H400
Aquatic Chronic 1	H410
Eye Dam. 1	H318

Concentration limits (Regulation (EC) No. 1272/2008)

Skin Sens. 1A	H317	0,0015 %
Aquatic Acute 1	H400	M = 10

**Further ingredients****(2-Methoxymethylethoxy)-propanol (mixed isomers)**

CAS No.	34590-94-8	EINECS no.	252-104-2
Registration no.	01-2119450011-60-XXXX		
Concentration	>= 1 <	10 %	[3]

**Note**

[3] Substance with occupational exposure limits  
For explanation of abbreviations see section 16.

**SECTION 4: First aid measures****4.1. Description of first aid measures****After inhalation**

Ensure supply of fresh air. In the event of symptoms take medical treatment.

**After skin contact**

Wash off immediately with soap and water.

**After eye contact**

In case of contact with the eyes rinse thoroughly with plenty of water or with an eye-cleaning solution.  
Seek medical advice immediately.

**After ingestion**

Rinse out mouth and give plenty of water to drink. Seek medical advice immediately.

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

There is no further relevant information available

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

There is no further relevant information available

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

Carbon dioxide, Dry powder, Water spray jet

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

If a fire breaks out nearby, pressure build-up and danger of bursting are possible.

**5.3. Advice for firefighters**

Cool endangered containers with water spray jet.

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

High risk of slipping due to leakage/spillage of product. Use personal protective clothing.

**6.2. Environmental precautions**

Do not allow to enter drains or waterways.

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

Take up with absorbent material (eg sand, kieselguhr, universal binder). When picked up, treat material as prescribed under Section 13 "Disposal".

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Observe the usual precautions for handling chemicals.

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

Emptied containers may contain product residues and therefore must be handled with care. Reuse only after appropriate cleaning. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

### 7.3. Specific end use(s)

No information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure limit values

#### (2-Methoxymethylethoxy)-propanol (mixed isomers)

List EH40

Type WEL

Value 308 mg/m<sup>3</sup> 50 ppm(V)

Maximum limit value; Skin resorption / sensibilisation: Sk; Pregnancy group; Status; Remarks: Sk

#### (2-Methoxymethylethoxy)-propanol (mixed isomers)

List IOELV

Type IOELV

Value 308 mg/m<sup>3</sup> 50 ppm(V)

Maximum limit value; Skin resorption / sensibilisation: Sk; Pregnancy group; Status; Remarks: Skin

### 8.2. Exposure controls

#### General protective and hygiene measures

Observe the usual precautions for handling chemicals. Personal protective equipment must comply with the Regulation (EC) No 2016/425 and the resulting CEN standards. The following information on personal protective equipment (PPE) is to be understood as a suggestion. The selection of the necessary PPE must be considered by the employer depending on the activities to be carried out and the local conditions. If it is determined during the on-site risk assessment that there is no danger to the employee, there is no need to wear PPE or the scope of the PPE to be used can be adjusted accordingly.

#### Respiratory protection

Not necessary.

#### Hand protection

Chemical resistant gloves

Appropriate Material nitrile

Material thickness >= 0,6 mm

Breakthrough time > 480 min

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374.

Check leaktightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. 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.

#### Eye protection

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Tightly fitting safety glasses

**Body protection**

Clothing as usual in the chemical industry.

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

<b>Physical state</b>	liquid		
<b>Colour</b>	light yellow, clear		
<b>Odour</b>	Product specific		
<b>Melting point</b>			
Remarks	not determined		
<b>Boiling point</b>			
Remarks	not determined		
<b>Flammability</b>			
evaluation	not determined		
<b>Explosion limits</b>			
Remarks	not determined		
<b>Flash point</b>			
Value	> 100		°C
<b>Ignition temperature</b>			
Remarks	not determined		
<b>Thermal decomposition</b>			
Remarks	Not relevant		
<b>pH value</b>			
Value	appr. 9,2		
<b>Viscosity</b>			
Value	appr. 15		s
Temperature	20	°C	
Method	DIN 53211 4 mm		
<b>Solubility in other solvents</b>			
	not determined		
<b>Octanol/water partition coefficient (log Pow)</b>			
Remarks	Not relevant		
<b>Vapour pressure</b>			
Remarks	not determined		
<b>Density</b>			
Value	appr. 1,02		kg/l
<b>Vapour density</b>			
Remarks	not determined		
<b>Particle characteristics</b>			
Remarks	irrelevant (liquid)		
<b>9.2. Other information</b>			
<b>Odour threshold</b>			
Remarks	No data available		
<b>Efflux time</b>			
Value	appr. 15		s
Temperature	20	°C	
Method	DIN 53211 4 mm		

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## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

No hazardous reactions when stored and handled according to prescribed instructions.

### **10.2. Chemical stability**

The product is stable.

### **10.3. Possibility of hazardous reactions**

Under normal conditions of storage and use, hazardous reactions will not occur.

### **10.4. Conditions to avoid**

Protect from heat and direct sunlight.

#### **Thermal decomposition**

Remarks	Not relevant
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### **10.5. Incompatible materials**

None known

### **10.6. Hazardous decomposition products**

No hazardous decomposition products known.

## **SECTION 11: Toxicological information**

### **11.1. Information on toxicological effects**

#### **Acute oral toxicity**

ATE	5.274	mg/kg
Method	calculated value (Regulation (EC) No. 1272/2008)	
Based on available data, the classification criteria are not met.		

#### **Acute oral toxicity (Components)**

##### **(2-Methoxymethylethoxy)-propanol (mixed isomers)**

Species	rat	
LD50	5135	mg/kg

##### **Fatty acids, ethoxylated**

ATE	1000	mg/kg
Source	Estimated value	

##### **2-Methyl-2H-isothiazol-3-one**

Reference substance	2-Methyl-2H-isothiazol-3-one	
Species	rat	
LD50	120	mg/kg

##### **2-Phenoxyethanol**

Reference substance	2-phenoxyethanol	
ATE	1394	mg/kg
Source	Literature value	

##### **Benzyl alcohol**

Species	rat	
LD50	1620	mg/kg

##### **Potassium hydroxide**

Reference substance	potassium hydroxide ...%	
ATE	333	mg/kg

#### **Acute dermal toxicity**

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

#### **Acute dermal toxicity (Components)**

##### **(2-Methoxymethylethoxy)-propanol (mixed isomers)**

Species	rabbit
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LD50 9510 mg/kg

**2-Methyl-2H-isothiazol-3-one**

Reference substance 2-Methyl-2H-isothiazol-3-one

Species rat

LD50 242 mg/kg

**2-Phenoxyethanol**

Reference substance 2-phenoxyethanol

Species rabbit

LD50 &gt; 2000 mg/kg

Source Literature value

**Acute inhalational toxicity**

ATE &gt; 100 mg/l

Administration/Form Vapors

Method calculated value (Regulation (EC) No. 1272/2008)

ATE &gt; 20 mg/l

Administration/Form Dust/Mist

Method calculated value (Regulation (EC) No. 1272/2008)

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

**Acute inhalative toxicity (Components)****(2-Methoxymethylethoxy)-propanol (mixed isomers)**

Species rat

LC50 60 mg/l

Duration of exposure 4 h

**2-Methyl-2H-isothiazol-3-one**

Reference substance 2-Methyl-2H-isothiazol-3-one

Species rat

LC50 0,11 mg/l

Duration of exposure 4 h

Administration/Form Vapors

**Benzyl alcohol**

Reference substance benzyl alcohol

Species Rats (male/female)

LC50 > 4178 mg/m<sup>3</sup>

Duration of exposure 4 h

**Skin corrosion/irritation**

evaluation irritant

The classification criteria are met.

**Serious eye damage/irritation**

evaluation corrosive

The classification criteria are met.

**Sensitization**

evaluation May cause sensitization by skin contact.

The classification criteria are met.

**Mutagenicity**

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

**Reproductive toxicity**

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

**Carcinogenicity**

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

**Specific Target Organ Toxicity (STOT)****Single exposure**

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

**Repeated exposure**



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

**Aspiration hazard**

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

**11.2 Information on other hazards****Endocrine disrupting properties with respect to humans**

The product does not contain a substance that has endocrine disrupting properties with respect to humans.

**SECTION 12: Ecological information****12.1. Toxicity****Fish toxicity****(2-Methoxymethylethoxy)-propanol (mixed isomers)**

Species	guppy ( <i>Poecilia reticulata</i> )		
LC50	>	1000	mg/l
Duration of exposure	96	h	
Method	OECD 203		

**sodium cumenesulphonate**

Reference substance	sodium cumenesulphonate		
Species	carp ( <i>Cyprinus carpio</i> )		
LC50	>	100	mg/l
Duration of exposure	96	h	
Method	OECD 203		

**2-Phenoxyethanol**

Reference substance	2-phenoxyethanol		
Species	Fathead minnow ( <i>Pimephales promelas</i> )		
LC50	>	100	mg/l
Duration of exposure	96	h	
Durchfluss			
Source	Literature value		

**Benzyl alcohol**

Reference substance	benzyl alcohol		
Species	Fathead minnow ( <i>Pimephales promelas</i> )		
LC50		460	mg/l
Duration of exposure	96	h	

**Daphnia toxicity****(2-Methoxymethylethoxy)-propanol (mixed isomers)**

Species	Daphnia magna		
LC50		1919	mg/l
Duration of exposure	48	h	
Species	Daphnia magna		
NOEC	>	0,5	mg/l
Duration of exposure	22	d	

**sodium cumenesulphonate**

Reference substance	sodium cumenesulphonate		
Species	Daphnia magna		
EC50	>	10	mg/l
Duration of exposure	48	h	
Method	OECD 202		

**2-Phenoxyethanol**

Reference substance	2-phenoxyethanol		
Species	Daphnia magna		
EC50	>	100	mg/l
Duration of exposure	48	h	

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Method OECD 202  
Source Literature value

**Benzyl alcohol**

Reference substance benzyl alcohol  
Species Daphnia magna  
LC50 230 mg/l  
Duration of exposure 48 h  
Method OECD 202

**Algae toxicity****(2-Methoxymethylethoxy)-propanol (mixed isomers)**

Species Skeletonema costatum  
EC50 6999 mg/l  
Duration of exposure 72 h

**sodium cumenesulphonate**

Reference substance sodium cumenesulphonate  
Species Desmodesmus subspicatus  
EC50 > 100 mg/l  
Duration of exposure 72 h

**2-Phenoxyethanol**

Reference substance 2-phenoxyethanol  
Species Desmodesmus subspicatus  
EC50 > 100 mg/l  
Duration of exposure 72 h

**Benzyl alcohol**

Reference substance benzyl alcohol  
Species Scenedesmus quadricauda  
EC50 640 mg/l  
Duration of exposure 96 h

**Bacteria toxicity****(2-Methoxymethylethoxy)-propanol (mixed isomers)**

Species Pseudomonas putida  
EC10 4168 mg/l  
Duration of exposure 18 h

**sodium cumenesulphonate**

Reference substance sodium cumenesulphonate  
Species activated sludge  
EC50 > 1000 mg/l  
Duration of exposure 3 h

**2-Phenoxyethanol**

Reference substance 2-phenoxyethanol  
Species activated sludge  
NOEC 248 mg/l  
Method OECD 209  
Source Literature value

**Benzyl alcohol**

Reference substance benzyl alcohol  
Species activated sludge  
IC50 2100 mg/l  
Duration of exposure 49 h

**12.2. Persistence and degradability**

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

**Biodegradability****(2-Methoxymethylethoxy)-propanol (mixed isomers)**

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Value	75			%
Duration of test evaluation	28	d		
Method	Readily biodegradable (according to OECD criteria) OECD 301 F			

**sodium cumenesulphonate**

Reference substance	sodium cumenesulphonate			
Value	> 60			%
Duration of test evaluation	28	d		
Method	Readily biodegradable (according to OECD criteria) OECD 301 B			

**Benzyl alcohol**

Reference substance	benzyl alcohol			
Value	92	to	96	%
Duration of test evaluation	14	d		
Method	readily degradable OECD 301 C			

**12.3. Bioaccumulative potential**

For this subsection there is no ecotoxicological data available on the product as such.

**Octanol/water partition coefficient (log Pow)**

Remarks Not relevant

**12.4. Mobility in soil**

For this subsection there is no ecotoxicological data available on the product as such.

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

The product contains no PBT substances. The product contains no vPvB substances.

**12.6 Endocrine disrupting properties****Endocrine disrupting properties with respect to the environment**

The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

**12.7. Other adverse effects**

For this subsection there is no ecotoxicological data available on the product as such.

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

Allocation of a waste code number, according to the European Waste Catalogue (EWC), should be carried out in agreement with the regional waste disposal company.

**Disposal recommendations for packaging**

Completely emptied packagings can be given for recycling.

**SECTION 14: Transport information**

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	Land transport ADR/RID	Marine transport IMDG/GGVSee
14.1. UN number	The product does not constitute a hazardous substance in land transport.	The product does not constitute a hazardous substance in sea transport.
14.2. UN proper shipping name	-	-
14.3. Transport hazard class(es)	-	-
14.4. Packing group	-	-
Label		
14.5. Environmental hazards	-	

**Information for all modes of transport****14.6. Special precautions for user**

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Other information****14.7 Maritime transport in bulk according to IMO instruments**

Not relevant

**SECTION 15: Regulatory information \*\*\*****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Ingredients (Regulation (EC) No 648/2004)****5 % or over but less than 15 %:**

non-ionic surfactants

**less than 5 %:**

anionic surfactants, polycarboxylates

**Further ingredients \*\*\***

perfumes, 1,2-benzisothiazol-3(2H)-one, 2-Methyl-2H-isothiazol-3-one, 1,2-benzisothiazol-3(2H)-one, Alpha Methyl Ionone, Benzyl Salicylate, Citronellol, coumarin, Eugenol, geraniol, Hexyl Cinnamal, linalool, Orange, sweet, ext., (R)-p-mentha-1,8-diene, Benzyl alcohol

**VOC \*\*\***

VOC (EU) 8,04 %

**Other information**

The product does not contain substances according to: Candidate List for inclusion in Annex XIV of Regulation (EC) No. 1907/2006 (REACH).

**15.2. Chemical safety assessment**

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

**SECTION 16: Other information**

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**

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Skin Irrit. 2	H315	Calculation method
Eye Dam. 1	H318	Calculation method
Skin Sens. 1A	H317	Calculation method

**Hazard statements listed in Chapter 2/3**

H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

**CLP categories listed in Chapter 2/3**

Acute Tox. 2	Acute toxicity, Category 2
Acute Tox. 3	Acute toxicity, Category 3
Acute Tox. 4	Acute toxicity, Category 4
Aquatic Acute 1	Hazardous to the aquatic environment, acute, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage, Category 1
Eye Irrit. 2	Eye irritation, Category 2
Flam. Liq. 3	Flammable liquid, Category 3
Met. Corr. 1	Substance or mixture corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion, Category 1A
Skin Corr. 1B	Skin corrosion, Category 1B
Skin Corr. 1C	Skin corrosion, Category 1C
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
Skin Sens. 1A	Skin sensitization, Category 1A
STOT SE 3	Specific target organ toxicity - single exposure, Category 3

**Abbreviations**

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route  
 RID: Règlement concernant le transport international ferroviaire de marchandises dangereuses  
 GGVSee: Gefahrgutverordnung See  
 IMDG: International Maritime Code for Dangerous Goods  
 CAS: Chemical Abstracts Service  
 EAK: Europäischer Abfallkatalog  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 VOC: Volatile Organic Compound  
 GefStoffV: Gefahrstoffverordnung  
 TA Luft: Technische Anleitung zur Reinhaltung der Luft  
 INCI: International Nomenclature of Cosmetic Ingredients  
 n.a.g.: nicht anders genannt  
 MAK: Maximale Arbeitsplatz-Konzentration  
 AGW: Arbeitsplatzgrenzwert  
 BGW: Biologischer Grenzwert  
 TRGS: Technische Regeln für Gefahrstoffe

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**\* Ozerna Polar**

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OEL: Occupational exposure limit

SUVA: Schweizerische Unfallversicherungsanstalt

WEL: Workplace exposure limit

MAC: Maximale aanvaarde concentratie (Netherlands)

MEL: Maximum exposure limits

NOEL: No observable effect level

NOEC: No observable effect concentration

LD: Lethal dose

LC: Lethal concentration

LLC: Lowest lethal concentration

PBT: Persistent, Bioaccumulative and Toxic

vPvB: Very persistent and very bioaccumulative

SVHC: Substances of very high concern

DNEL: Derived no effect level

DMEL: Derived minimal effect level

PNEC: Predicted no effect concentration

PEC: Predicted environmental concentration

GHS: Globally Harmonized System of classification and Labelling of Chemicals

REACH: Registration, Evaluation, Autohorisation and Restriction of Chemicals

UN: United Nations

EG: Europäische Gemeinschaft

EWG: Europäische Wirtschaftsgemeinschaft

EU: European Union

HSNO: Hazardous Substances and New Organisms Act (New Zealand)

ATE: Acute Toxicity Estimate

STOT: Specific Target Organ Toxicity

**Supplemental information**

Relevant changes compared with the previous version of the safety data sheet are marked with: \*\*\*  
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.