



# Zinc

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Issue date: 27/06/2023 Revision date: 20/04/2023 Supersedes version of: 25/03/2022 Version: 1.1

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

#### 1.1. Product identifier

Product name : Zinc  
UFI : HS8X-G8V9-A00N-18TH  
Product code : BDS002445AE  
Vaporizer : Aerosol

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

##### 1.2.1. Relevant identified uses

Main use category : Professional use  
Use of the substance/mixture : Paints

##### 1.2.2. Uses advised against

No additional information available

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

##### Supplier

CRC Industries Europe B.V.  
Touwslagerstraat 1  
9240 Zele  
Belgium  
T +32(0)52/45.60.11 - F +32(0)52/45.00.34  
[hse@crcind.com](mailto:hse@crcind.com) - [www.crcind.com](http://www.crcind.com)

#### 1.4. Emergency telephone number

Emergency number : +32(0)52/45.60.11  
Office hours: 9-17h CET

Country	Organisation/Company	Address	Emergency number	Comment
Belgium	Centre Anti-Poisons/Antigifcentrum c/o Hôpital Militaire Reine Astrid	Rue Bruyn 1 1120 Brussels	+32 70 245 245	Please dial: 070 245 245 for any urgent questions about intoxication (free of charge 24/7), if not accessible, dial: 02 264 96 30 (standard fee)

### SECTION 2: Hazards identification

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

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Aerosol, Category 1 H222;H229  
Skin corrosion/irritation, Category 2 H315  
Serious eye damage/eye irritation, Category 2 H319  
Specific target organ toxicity – Single exposure, Category 3, Narcosis H336  
Aspiration hazard, Category 1 H304  
Hazardous to the aquatic environment – Acute Hazard, Category 1 H400  
Hazardous to the aquatic environment – Chronic Hazard, Category 1 H410  
Full text of H- and EUH-statements: see section 16

##### Adverse physicochemical, human health and environmental effects

Pressurised container: May burst if heated. Extremely flammable aerosol. May cause drowsiness or dizziness. Causes skin irritation. Causes serious eye irritation. May be fatal if swallowed and enters airways. Very toxic to aquatic life with long lasting effects.

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### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS07

GHS09

Signal word (CLP) :

Danger

Contains :

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics; Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane; butanone; ethyl methyl ketone

Hazard statements (CLP) :

H222 - Extremely flammable aerosol.  
H229 - Pressurised container: May burst if heated.  
H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H336 - May cause drowsiness or dizziness.  
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) :

P102 - Keep out of reach of children.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P211 - Do not spray on an open flame or other ignition source.  
P251 - Do not pierce or burn, even after use.  
P261 - Avoid breathing vapours/spray.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C.  
P501 - Dispose of contents/container to a hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards

Contains no PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

Other information :

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
dimethyl ether (Propellant gas (Aerosol)) substance with national workplace exposure limit(s) (BE); substance with a Community workplace exposure limit	CAS-No.: 115-10-6 EC-No.: 204-065-8 EC Index-No.: 603-019-00-8 REACH-no: 01-2119472128-37	50 – 75	Flam. Gas 1, H220 Press. Gas (Liq.), H280
zinc powder— zinc dust (stabilised)	CAS-No.: 7440-66-6 EC-No.: 231-175-3 EC Index-No.: 030-001-01-9 REACH-no: 01-2119467174-37	25 – 50	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	EC-No.: 919-857-5 REACH-no: 01-2119463258-33	5 – 10	Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304 EUH066
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	EC-No.: 921-024-6 REACH-no: 01-2119475514-35	5 – 10	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
butanone; ethyl methyl ketone substance with national workplace exposure limit(s) (BE); substance with a Community workplace exposure limit	CAS-No.: 78-93-3 EC-No.: 201-159-0 EC Index-No.: 606-002-00-3 REACH-no: 01-2119457290-43	5 – 10	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066
zinc oxide substance with national workplace exposure limit(s) (BE)	CAS-No.: 1314-13-2 EC-No.: 215-222-5 EC Index-No.: 030-013-00-7 REACH-no: 01-2119463881-32	1 – 5	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Calcium bis(2-ethylhexanoate)	CAS-No.: 136-51-6 EC-No.: 205-249-0 REACH-no: 01-2119978297-19	< 0,5	Eye Dam. 1, H318 Repr. 2, H361f

Product subject to CLP Article 1.1.3.7. The disclosure rules of the components is modified in this case.

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If signs/symptoms develop, get medical attention.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention. Seek medical attention if irritation develops.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Seek medical attention if irritation develops.
First-aid measures after ingestion	: Do not induce vomiting. Call a physician immediately. Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

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

Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: Irritation. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: Risk of lung oedema.

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

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.  
Unsuitable extinguishing media : Do not use a heavy water stream.

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

- Fire hazard : Extremely flammable aerosol.  
Explosion hazard : Pressurised container: May burst if heated.  
Hazardous decomposition products in case of fire : During fire, gases hazardous to health may be formed.

#### 5.3. Advice for firefighters

- Firefighting instructions : Move containers from fire area if it can be done without personal risk. Use standard firefighting procedures and consider the hazards of other involved materials.  
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

- Protective equipment : Wear appropriate protective equipment and clothing during clean-up.  
Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

##### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".  
Emergency procedures : Evacuate unnecessary personnel. Ventilate area.

#### 6.2. Environmental precautions

Avoid release to the environment. Avoid the spillage or runoff entering drains, sewers or watercourses.

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

- For containment : Collect spillage.  
Methods for cleaning up : Mechanically recover the product. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Following product recovery, flush area with water. Take up small spills with dry chemical absorbent. Clean surface thoroughly to remove residual contamination.  
Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For disposal of contaminated materials refer to section 13 : "Disposal considerations".

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid prolonged exposure. Handle in accordance with good industrial hygiene and safety procedures.  
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Keep container closed when not in use.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

dimethyl ether (115-10-6)	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	Dimethylether
IOEL TWA	1920 mg/m <sup>3</sup>
IOEL TWA [ppm]	1000 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
<b>Belgium - Occupational Exposure Limits</b>	
Local name	Oxyde de diméthyle # Dimethylether
OEL TWA	1920 mg/m <sup>3</sup>
OEL TWA [ppm]	1000 ppm
Regulatory reference	Koninklijk besluit/Arrêté royal 11/05/2021
zinc oxide (1314-13-2)	
<b>Belgium - Occupational Exposure Limits</b>	
Local name	Zinc (oxyde de) (fraction alvéolaire) # Zinkoxide (inadembare fractie)
OEL TWA	2 mg/m <sup>3</sup>
OEL STEL	10 mg/m <sup>3</sup>
Regulatory reference	Koninklijk besluit/Arrêté royal 11/05/2021
butanone; ethyl methyl ketone (78-93-3)	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	Butanone
IOEL TWA	600 mg/m <sup>3</sup>
IOEL TWA [ppm]	200 ppm
IOEL STEL	900 mg/m <sup>3</sup>
IOEL STEL [ppm]	300 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
<b>Belgium - Occupational Exposure Limits</b>	
Local name	2-Butanone # 2-Butanon
OEL TWA	600 mg/m <sup>3</sup>
OEL TWA [ppm]	200 ppm
OEL STEL	900 mg/m <sup>3</sup>

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<b>butanone; ethyl methyl ketone (78-93-3)</b>	
OEL STEL [ppm]	300 ppm
Regulatory reference	Koninklijk besluit/Arrêté royal 11/05/2021

### 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

<b>zinc powder— zinc dust (stabilised) (7440-66-6)</b>	
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	14,4 µg/l
PNEC aqua (marine water)	7,2 µg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	146,9 mg/kg dwt
PNEC sediment (marine water)	162,2 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	83,1 mg/kg dwt
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	100 µg/l
<b>Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, &lt; 2% aromatics</b>	
<b>DNEL/DMEL (Workers)</b>	
Long-term - systemic effects, dermal	208 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	871 mg/m <sup>3</sup>
<b>DNEL/DMEL (General population)</b>	
Long-term - systemic effects, oral	125 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	185 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	125 mg/kg bodyweight/day
<b>zinc oxide (1314-13-2)</b>	
<b>DNEL/DMEL (Workers)</b>	
Long-term - systemic effects, dermal	83 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	5 mg/m <sup>3</sup>
Long-term - local effects, inhalation	0,5 mg/m <sup>3</sup>
<b>DNEL/DMEL (General population)</b>	
Long-term - systemic effects, oral	0,83 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	2,5 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	83 mg/kg bodyweight/day
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	20,6 µg/l
PNEC aqua (marine water)	6,1 µg/l

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<b>zinc oxide (1314-13-2)</b>	
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	117,8 mg/kg dwt
PNEC sediment (marine water)	56,5 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	35,6 mg/kg dwt
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	100 µg/l
<b>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane</b>	
<b>DNEL/DMEL (Workers)</b>	
Long-term - systemic effects, dermal	773 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	2035 mg/m <sup>3</sup>
<b>DNEL/DMEL (General population)</b>	
Long-term - systemic effects, oral	699 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	608 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	699 mg/kg bodyweight/day
<b>butanone; ethyl methyl ketone (78-93-3)</b>	
<b>DNEL/DMEL (Workers)</b>	
Long-term - systemic effects, dermal	1161 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	600 mg/m <sup>3</sup>
<b>DNEL/DMEL (General population)</b>	
Long-term - systemic effects, oral	31 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	106 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	412 mg/kg bodyweight/day
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	55,8 mg/l
PNEC aqua (marine water)	55,8 mg/l
PNEC aqua (intermittent, freshwater)	55,8 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	284,74 mg/kg dwt
PNEC sediment (marine water)	284,7 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	22,5 mg/kg dwt
<b>PNEC (Oral)</b>	
PNEC oral (secondary poisoning)	1000 mg/kg food
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	709 mg/l

### 8.1.5. Control banding

No additional information available

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### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

##### Appropriate engineering controls:

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

#### 8.2.2. Personal protection equipment

##### Personal protective equipment symbol(s):



##### 8.2.2.1. Eye and face protection

###### Eye protection:

Use eye protection according to EN 166. Safety glasses with side shields.

##### 8.2.2.2. Skin protection

###### Skin and body protection:

Wear suitable protective clothing

###### Hand protection:

Wear suitable gloves tested to EN374. The breakthrough time of the glove should be longer than the total duration of product use. If work lasts longer than the breakthrough time, gloves should be changed part-way through. Nitrile gloves are recommended.

##### 8.2.2.3. Respiratory protection

###### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Approved organic vapour respirator. Filter type: AX

##### 8.2.2.4. Thermal hazards

###### Thermal hazard protection:

Not expected to present a significant hazard under anticipated conditions of normal use. Wear appropriate thermal protective clothing, when necessary.

#### 8.2.3. Environmental exposure controls

##### Environmental exposure controls:

Avoid release to the environment. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Colour	: Purple.
Appearance	: DME propelled liquid.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Extremely flammable aerosol.
Explosive properties	: Pressurised container: May burst if heated.
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: -35 °C (closed cup)
Auto-ignition temperature	: > 200
Decomposition temperature	: Not available



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pH	: Not applicable
Viscosity, kinematic	: < 20,5 mm <sup>2</sup> /s
Solubility	: insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not applicable
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1,42 g/cm <sup>3</sup> at 20 °C
Relative density	: 1,42 at 20 °C
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

% of flammable ingredients : 75 – 100 %

#### 9.2.2. Other safety characteristics

VOC content : 640 g/l (Cat.II B(e) VOC max 840 g/L)  
Additional information : For aerosols data for the product without propellant.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Extremely flammable aerosol. Pressurised container: May burst if heated.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

Strong oxidizing agents.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Carbon oxides (CO, CO<sub>2</sub>).

## SECTION 11: Toxicological information

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

**Acute toxicity (oral)** : Not classified (Based on available data, the classification criteria are not met)  
**Acute toxicity (dermal)** : Not classified (Based on available data, the classification criteria are not met)  
**Acute toxicity (inhalation)** : Not classified (Based on available data, the classification criteria are not met)

#### dimethyl ether (115-10-6)

LC50 Inhalation - Rat	308,5 mg/l/4h
LC50 Inhalation - Rat [ppm]	164000 ppm

#### zinc powder— zinc dust (stabilised) (7440-66-6)

LD50 oral rat	> 2000 mg/kg bodyweight
LC50 Inhalation - Rat	> 5,41 mg/l/4h

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<b>Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, &lt; 2% aromatics</b>	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
<b>zinc oxide (1314-13-2)</b>	
LD50 oral rat	7950 mg/kg
LD50 dermal rat	> 2000 mg/kg bodyweight
LC50 Inhalation - Rat	2500 mg/l
<b>Calcium bis(2-ethylhexanoate) (136-51-6)</b>	
LD50 oral rat	2043 mg/kg
LD50 dermal rat	> 2000 mg/kg bodyweight
<b>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane</b>	
LD50 oral rat	5841 mg/kg
LD50 dermal rat	2800 – 3100 mg/kg bodyweight
LC50 Inhalation - Rat	> 25,2 mg/l/4h
<b>butanone; ethyl methyl ketone (78-93-3)</b>	
LD50 oral rat	> 2193 mg/kg bodyweight
LD50 dermal	6400 mg/kg bodyweight
LC50 Inhalation - Rat (Dust/Mist)	> 5000 mg/l/4h
<b>Skin corrosion/irritation</b>	: Causes skin irritation. pH: Not applicable
<b>Serious eye damage/irritation</b>	: Causes serious eye irritation. pH: Not applicable
<b>Respiratory or skin sensitisation</b>	: Not classified (Based on available data, the classification criteria are not met)
<b>Germ cell mutagenicity</b>	: Not classified (Based on available data, the classification criteria are not met)
<b>Carcinogenicity</b>	: Not classified (Based on available data, the classification criteria are not met)
<b>Reproductive toxicity</b>	: Not classified (Based on available data, the classification criteria are not met)
<b>STOT-single exposure</b>	: May cause drowsiness or dizziness.
<b>Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, &lt; 2% aromatics</b>	
STOT-single exposure	May cause drowsiness or dizziness.
<b>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane</b>	
STOT-single exposure	May cause drowsiness or dizziness.
<b>butanone; ethyl methyl ketone (78-93-3)</b>	
STOT-single exposure	May cause drowsiness or dizziness.
<b>STOT-repeated exposure</b>	: Not classified (Based on available data, the classification criteria are not met)
<b>Calcium bis(2-ethylhexanoate) (136-51-6)</b>	
NOAEL (subchronic, oral, animal/male, 90 days)	180 mg/kg bodyweight
NOAEL (subchronic, oral, animal/female, 90 days)	205 mg/kg bodyweight
<b>Aspiration hazard</b>	: May be fatal if swallowed and enters airways.
<b>Zinc</b>	
Vaporizer	Aerosol
Viscosity, kinematic	< 20,5 mm <sup>2</sup> /s

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<b>Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, &lt; 2% aromatics</b>	
Viscosity, kinematic	1,33 mm <sup>2</sup> /s
<b>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane</b>	
Viscosity, kinematic	0,7 mm <sup>2</sup> /s

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

#### 11.2.2. Other information

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.  
Hazardous to the aquatic environment, short-term (acute) : Very toxic to aquatic life.  
Hazardous to the aquatic environment, long-term (chronic) : Very toxic to aquatic life with long lasting effects.  
Not rapidly degradable

<b>dimethyl ether (115-10-6)</b>	
LC50 - Fish [1]	> 4,1 g/l
EC50 - Crustacea [1]	> 4,4 g/l Daphnia magna (Water flea)
EC50 96h - Algae [1]	154917 mg/l

<b>Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, &lt; 2% aromatics</b>	
LC50 - Fish [1]	> 1000 mg/l
EC50 - Crustacea [1]	> 1000 mg/l
EC50 - Other aquatic organisms [1]	> 1000 mg/l
EC50 72h - Algae [1]	> 1000 mg/l

<b>Calcium bis(2-ethylhexanoate) (136-51-6)</b>	
LC50 - Fish [1]	> 100 mg/l
EC50 - Crustacea [1]	910 mg/l Daphnia magna (Water flea)
EC50 72h - Algae [1]	500 mg/l
NOEC (chronic)	18 mg/l 21 d

<b>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane</b>	
LC50 - Fish [1]	11,4 mg/l
EC50 - Crustacea [1]	3 mg/l
EC50 72h - Algae [1]	10 mg/l
LOEC (chronic)	0,32 mg/l
NOEC (chronic)	0,17 mg/l

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### Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

NOEC chronic fish	2,04 mg/l
NOEC chronic crustacea	1 mg/l

### butanone; ethyl methyl ketone (78-93-3)

LC50 - Fish [1]	2993 mg/l
EC50 - Crustacea [1]	308 mg/l
EC50 - Other aquatic organisms [1]	308 mg/l
EC50 72h - Algae [1]	1972 mg/l
EC50 96h - Algae [1]	2029 mg/l

### 12.2. Persistence and degradability

#### Zinc

Persistence and degradability	Not established. No data is available on the degradability of this product.
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### 12.3. Bioaccumulative potential

#### Zinc

Partition coefficient n-octanol/water (Log Kow)	Not applicable
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#### dimethyl ether (115-10-6)

Partition coefficient n-octanol/water (Log Pow)	0,07
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#### zinc powder— zinc dust (stabilised) (7440-66-6)

Partition coefficient n-octanol/water (Log Pow)	-0,47
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#### butanone; ethyl methyl ketone (78-93-3)

Partition coefficient n-octanol/water (Log Pow)	0,3
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### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

#### Zinc

Results of PBT assessment	Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII
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### 12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

### 12.7. Other adverse effects

Additional information : No other effects known  
Global warming potential (GWP) : 1 (Fluorinated greenhouse gases - (EC) No 517/2014)

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### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
European List of Waste (LoW) code : According to the European Waste Catalogue (EWC), Waste Codes are not product specific, but application specific Waste codes should be assigned by the user based on the application for which the product was used.

### SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
UN 1950	UN 1950	UN 1950	UN 1950	UN 1950
<b>14.2. UN proper shipping name</b>				
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS	AEROSOLS
<b>Transport document description</b>				
UN 1950 AEROSOLS, 2.1, (D), ENVIRONMENTALLY HAZARDOUS	UN 1950 AEROSOLS, 2.1, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 1950 Aerosols, flammable, 2.1, ENVIRONMENTALLY HAZARDOUS	UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS	UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS
<b>14.3. Transport hazard class(es)</b>				
2.1	2.1	2.1	2.1	2.1
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available				

#### 14.6. Special precautions for user

##### Overland transport

Classification code (ADR) : 5F  
Special provisions (ADR) : 190, 327, 344, 625  
Limited quantities (ADR) : 1I  
Excepted quantities (ADR) : E0  
Packing instructions (ADR) : P207, LP200  
Special packing provisions (ADR) : PP87, RR6, L2  
Mixed packing provisions (ADR) : MP9  
Transport category (ADR) : 2  
Special provisions for carriage - Packages (ADR) : V14  
Special provisions for carriage - Loading, unloading and handling (ADR) : CV9, CV12  
Special provisions for carriage - Operation (ADR) : S2  
Tunnel restriction code (ADR) : D

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### Transport by sea

Special provisions (IMDG)	: 63, 190, 277, 327, 344, 381, 959
Limited quantities (IMDG)	: SP277
Excepted quantities (IMDG)	: E0
Packing instructions (IMDG)	: P207, LP200
Special packing provisions (IMDG)	: PP87, L2
EmS-No. (Fire)	: F-D
EmS-No. (Spillage)	: S-U
Stowage category (IMDG)	: None
Stowage and handling (IMDG)	: SW1, SW22
Segregation (IMDG)	: SG69

### Air transport

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Y203
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 203
PCA max net quantity (IATA)	: 75kg
CAO packing instructions (IATA)	: 203
CAO max net quantity (IATA)	: 150kg
Special provisions (IATA)	: A145, A167, A802
ERG code (IATA)	: 10L

### Inland waterway transport

Classification code (ADN)	: 5F
Special provisions (ADN)	: 190, 327, 344, 625
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E0
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01, VE04
Number of blue cones/lights (ADN)	: 1

### Rail transport

Classification code (RID)	: 5F
Special provisions (RID)	: 190, 327, 344, 625
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E0
Packing instructions (RID)	: P207, LP200
Special packing provisions (RID)	: PP87, RR6, L2
Mixed packing provisions (RID)	: MP9
Transport category (RID)	: 2
Special provisions for carriage – Packages (RID)	: W14
Special provisions for carriage - Loading, unloading and handling (RID)	: CW9, CW12
Colis express (express parcels) (RID)	: CE2
Hazard identification number (RID)	: 23

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

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

##### REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

##### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

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### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

### VOC Directive (2004/42)

VOC content : 640 g/l (Cat.II B(e) VOC max 840 g/L)

### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

### Drug Precursors Regulation (273/2004)

Contains substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

Name	CN designation	CAS-No.	CN code	Category	Threshold	Annex
Methylethylketone	Butanone	78-93-3	2914 12 00	Category 3		Annex I

### 15.1.2. National regulations

No additional information available

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

### Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose

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Abbreviations and acronyms:	
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Aerosol 1	Aerosol, Category 1
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
EUH066	Repeated exposure may cause skin dryness or cracking.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Gas 1	Flammable gases, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.



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Full text of H- and EUH-statements:	
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
Press. Gas (Liq.)	Gases under pressure : Liquefied gas
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

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