according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 4 Jan 2023 Print date: 24 Jan 2023 Version: 1

Page 1/16

Zinc 240 500ml

# TECH MASTERS world of innovations

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

## **1.1. Product identifier** Trade name/designation:

Zinc 240 500ml

Article No.: T111002 UFI: XM56-D9EK-31NQ-J0MD

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

Aerosol coating

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

## Supplier:

Techniqua Handels GmbH Hartleitnerstraße 3 4653 Eberstalzell Austria Telephone: +43 (0) 7241 213 79 E-mail: office@techniqua.at

## **1.4. Emergency telephone number**

Vergiftungsinformationszentrale (VIZ), Stubenring 6, 1010 Wien, 24h: 01 406 43 43, Montag - Freitag: 8 bis 16 Uhr, Tel.: 01 406 68 98 (keine medizinische Auskunft) (Only available during office hours.)

## **SECTION 2: Hazards identification**

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

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

Hazard classes and hazard	Hazard statements	Classification procedure
categories		
Hazardous to the aquatic environment (Aquatic Acute 1)	H400: Very toxic to aquatic life.	
Hazardous to the aquatic environment (Aquatic Chronic 1)	H410: Very toxic to aquatic life with long lasting effects.	
Serious eye damage/eye irritation (Eye Irrit. 2)	H319: Causes serious eye irritation.	
STOT-single exposure (STOT SE 3)	H336: May cause drowsiness or dizziness.	
Aerosols (Aerosol 1)	H222; H229: Extremely flammable aerosol. Pressurised container: May burst if heated.	

## 2.2. Label elements Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms:



according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 4 Jan 2023 Print date: 24 Jan 2023 Version: 1

Page 2/16

Zinc 240 500ml

### Signal word: Danger

### Hazard components for labelling:

Acetone; Hydrocarbons, C9, aromatics; propan-2-ol		
Hazard statements for physical hazards		
H222	Extremely flammable aerosol.	
H229	Pressurised container: May burst if heated.	
Hazard statements for health hazards		
H319	Causes serious eye irritation.	

H410	Very toxic to aquatic life with long lasting effects.

## Supplemental hazard information

EUH066	Repeated exposure may cause skin dryness or cracking.	
Precautionary statements Prevention		
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.	
P260	Do not breathe dust/fume/gas/mist/vapours/spray.	
P271	Use only outdoors or in a well-ventilated area.	
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.	

## Precautionary statements Response

P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.	
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P312	Call a POISON CENTER if you feel unwell.	

## Precautionary statements Storage

P403	Store in a well-ventilated place.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

### Precautionary statements Disposal

P501 Dispose of contents/container to an appropriate recycling or disposal facility.

## 2.3. Other hazards

### Other adverse effects:

The product does not meet the PBT/vPvB criteria.

## **SECTION 3: Composition/information on ingredients**

### 3.2. Mixtures

### **Description:**

Active ingredient mixture with propellant gas

## Additional information:

Aerosols and containers fitted with a solid nebuliser containing substances or mixtures classified as hazardous by aspiration must not be labelled for this hazard.

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 4 Jan 2023 Print date: 24 Jan 2023 Version: 1



Page 3/16

## Zinc 240 500ml

Hazardous ingredients / Hazardous impurities / Stabilisers:			
Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration	
CAS No.: 115-10-6 EC No.: 204-065-8 REACH No.: 01-2119472128-37	dimethyl ether Flam. Gas 1A (H220), Press. Gas (Liq.) (H280)	25 - < 50 %	
CAS No.: 7440-66-6 EC No.: 231-175-3 Index No.: 030-001-01-9 REACH No.: 01-2119467174-37	Zinc powder - Zinc dust (stabilised) Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410) Warning	25 - < 50 %	
CAS No.: 67-64-1 Index No.: 606-001-00-8 REACH No.: 01-2119471330-49	Acetone Eye Irrit. 2 (H319), Flam. Liq. 2 (H225), STOT SE 3 (H336)	10 - < 25 %	
CAS No.: 128601-23-0 EC No.: 918-668-5 REACH No.: 01-2119455851-35	Hydrocarbons, C9, aromatics Aquatic Chronic 2 (H411), Asp. Tox. 1 (H304), Flam. Liq. 3 (H226), STOT SE 3 (H335, H336)	2.5 - < 10 %	
EC No.: 905-588-0 REACH No.: 01-2119488216-32	Reaction mass of ethylbenzene and xylene           Acute Tox. 4 (H312, H332), Asp. Tox. 1 (H304), Eye Irrit. 2 (H319),           Flam. Liq. 3 (H226), STOT RE 2 (H373), STOT SE 3 (H335),           Skin Irrit. 2 (H315)	2.5 - < 10 %	
CAS No.: 1314-13-2 EC No.: 215-222-5 Index No.: 030-013-00-7 REACH No.: 01-2119463881-32	<b>zinc oxide</b> Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410) Warning	1 - < 2.5 %	
CAS No.: 67-63-0 EC No.: 200-661-7 Index No.: 603-117-00-0 REACH No.: 01-2119457558-25	propan-2-ol Eye Irrit. 2 (H319), Flam. Liq. 2 (H225), STOT SE 3 (H336) (	1-<2.5 %	

Full text of H- and EUH-phrases: see section 16.

## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

#### Following inhalation:

Fresh air supply, consult a doctor in case of complaints.

## In case of skin contact:

In general, the product is not irritating to skin.

#### After eye contact:

Rinse opened eye for several minutes under running water. Consult a doctor if symptoms persist

#### Following ingestion:

Do not induce vomiting, seek medical help immediately.

### **4.2. Most important symptoms and effects, both acute and delayed** No further relevant information available.

#### **4.3. Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

## Suitable extinguishing media:

Water mist, Extinguishing powder, Carbon dioxide, alcohol resistant foam

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 4 Jan 2023 Print date: 24 Jan 2023 Version: 1

Page 4/16

## Zinc 240 500ml

### Unsuitable extinguishing media:

Water in full jet

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

### No further relevant information available.

#### 5.3. Advice for firefighters

Special protective equipment: Put on breathing apparatus.

### **SECTION 6: Accidental release measures**

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

#### 6.1.1. For non-emergency personnel

#### **Personal precautions:**

Wear protective equipment. Keep unprotected persons away.

#### 6.1.2. For emergency responders

No data available

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. In case of spillage into water or sewage system, inform the competent authorities.

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

#### For cleaning up:

Do not wash away with water or aqueous detergents.

#### **Other information:**

Provide adequate ventilation.

### 6.4. Reference to other sections

Further information on proper storage: see section 7. For further information on personal protective equipment: see section 8. For further information on disposal: see section 13.

## **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

### **Protective measures**

#### Advices on safe handling:

Ensure good ventilation/extraction at the workplace.

#### Fire prevent measures:

Do not spray on naked flames or any incandescent material. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Container is under pressure. Protect from sunlight and temperatures above 50°C (e.g. from incandescent lamps). Do not open by force or burn even after use.

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

#### Requirements for storage rooms and vessels:

Store in a cool place. The official regulations for the storage of pressurised gas packages must be observed.

#### Hints on storage assembly:

The official regulations for the storage of pressurised gas packages must be observed. **Storage class (TRGS 510, Germany):** 2B – Aerosol dispensers and lighters

#### Further information on storage conditions:

Store in a cool, dry place in well-sealed containers. Protect from heat and direct sunlight.

## 7.3. Specific end use(s)

#### **Recommendation:**

No further relevant information available.



according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 4 Jan 2023 Print date: 24 Jan 2023 Version: 1

Page 5/16

Zinc 240 500ml

## **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

### 8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	<ol> <li>Long-term occupational exposure limit value</li> <li>Short-term occupational exposure limit value</li> <li>Instantaneous value</li> <li>Monitoring and observation processes</li> <li>Remark</li> </ol>
MAK (AT)	dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	<ol> <li>1,000 ppm (1,910 mg/m<sup>3</sup>)</li> </ol>
MAK (AT)	dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	<ul> <li>2,000 ppm (3,820 mg/m<sup>3</sup>)</li> <li>(max. 3x60 min./Schicht, Momentanwert)</li> </ul>
IOELV (EU)	<b>dimethyl ether</b> CAS No.: 115-10-6 EC No.: 204-065-8	<ol> <li>1,000 ppm (1,920 mg/m<sup>3</sup>)</li> </ol>
MAK (AT)	Acetone CAS No.: 67-64-1	<ul> <li>2,000 ppm (4,800 mg/m<sup>3</sup>)</li> <li>(5) (max. 4x15 min./Schicht)</li> </ul>
IOELV (EU)	Acetone CAS No.: 67-64-1	<ol> <li>500 ppm (1,210 mg/m<sup>3</sup>)</li> </ol>
MAK (AT)	Acetone CAS No.: 67-64-1	<ol> <li>500 ppm (1,200 mg/m<sup>3</sup>)</li> </ol>
MAK (AT)	<b>zinc oxide</b> CAS No.: 1314-13-2 EC No.: 215-222-5	<ol> <li>5 mg/m<sup>3</sup></li> <li>(alveolengängige Fraktion)</li> </ol>
MAK (AT)	<b>propan-2-ol</b> CAS No.: 67-63-0 EC No.: 200-661-7	<ul> <li>2 800 ppm (2,000 mg/m<sup>3</sup>)</li> <li>5 (max. 4x15 min./Schicht)</li> </ul>
MAK (AT)	<b>propan-2-ol</b> CAS No.: 67-63-0 EC No.: 200-661-7	<ol> <li>200 ppm (500 mg/m<sup>3</sup>)</li> </ol>

#### 8.1.2. Biological limit values No data available

### 8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type
		② Exposure route
<b>Zinc powder - Zinc dust (stabilised)</b> CAS No.: 7440-66-6 EC No.: 231-175-3	5 mg/m <sup>3</sup>	<ol> <li>DNEL worker</li> <li>Long-term - inhalation, systemic effects</li> </ol>
<b>Zinc powder - Zinc dust (stabilised)</b> CAS No.: 7440-66-6 EC No.: 231-175-3	2.5 mg/m <sup>3</sup>	<ol> <li>DNEL Consumer</li> <li>Long-term - inhalation, systemic effects</li> </ol>
<b>Zinc powder - Zinc dust (stabilised)</b> CAS No.: 7440-66-6 EC No.: 231-175-3	5,000 mg/kg bw/day	<ol> <li>DNEL worker</li> <li>Long-term - dermal, systemic effects</li> </ol>
Zinc powder - Zinc dust (stabilised) CAS No.: 7440-66-6 EC No.: 231-175-3	5,000 mg/kg bw/day	<ol> <li>DNEL Consumer</li> <li>Long-term - dermal, systemic effects</li> </ol>
<b>Zinc powder - Zinc dust (stabilised)</b> CAS No.: 7440-66-6 EC No.: 231-175-3	50 mg/kg bw/ day	<ol> <li>DNEL worker</li> <li>Long-term - oral, systemic effects</li> </ol>
Acetone CAS No.: 67-64-1	1,210 mg/m <sup>3</sup>	<ol> <li>DNEL worker</li> <li>Long-term - inhalation, systemic effects</li> </ol>



according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 4 Jan 2023 Print date: 24 Jan 2023 Version: 1



Page 6/16

## Zinc 240 500ml

Substance name	DNEL value	<ol> <li>DNEL type</li> <li>Exposure route</li> </ol>
Acetone	200 mg/m <sup>3</sup>	
CAS No.: 67-64-1	200 mg/m-	<ol> <li>DNEL Consumer</li> <li>Long-term - inhalation, systemic effects</li> </ol>
Acetone CAS No.: 67-64-1	2,420 mg/m <sup>3</sup>	<ol> <li>DNEL worker</li> <li>Long-term - inhalation, local effects</li> </ol>
<b>Acetone</b> CAS No.: 67-64-1	186 mg/kg bw/ day	<ol> <li>DNEL worker</li> <li>Long-term - dermal, systemic effects</li> </ol>
<b>Acetone</b> CAS No.: 67-64-1	62 mg/kg bw/ day	<ol> <li>DNEL Consumer</li> <li>Long-term - dermal, systemic effects</li> </ol>
<b>Acetone</b> CAS No.: 67-64-1	62 mg/kg bw/ day	<ol> <li>DNEL Consumer</li> <li>Long-term - oral, systemic effects</li> </ol>
Hydrocarbons, C9, aromatics CAS No.: 128601-23-0 EC No.: 918-668-5	100 mg/m³	<ol> <li>DNEL worker</li> <li>Long-term - inhalation, systemic effects</li> </ol>
Hydrocarbons, C9, aromatics CAS No.: 128601-23-0 EC No.: 918-668-5	32 mg/m³	<ol> <li>DNEL Consumer</li> <li>Long-term - inhalation, systemic effects</li> </ol>
Hydrocarbons, C9, aromatics CAS No.: 128601-23-0 EC No.: 918-668-5	25 mg/kg bw/ day	<ol> <li>DNEL worker</li> <li>Long-term - dermal, systemic effects</li> </ol>
Hydrocarbons, C9, aromatics CAS No.: 128601-23-0 EC No.: 918-668-5	11 mg/kg bw/ day	<ol> <li>DNEL Consumer</li> <li>Long-term - dermal, systemic effects</li> </ol>
Hydrocarbons, C9, aromatics CAS No.: 128601-23-0 EC No.: 918-668-5	11 mg/kg bw/ day	<ol> <li>DNEL Consumer</li> <li>Long-term - oral, systemic effects</li> </ol>
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	77 mg/m³	<ol> <li>DNEL worker</li> <li>Long-term - inhalation, systemic effects</li> </ol>
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	14.8 mg/m <sup>3</sup>	<ol> <li>DNEL Consumer</li> <li>Long-term - inhalation, systemic effects</li> </ol>
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	289 mg/m³	<ol> <li>DNEL worker</li> <li>Acute - inhalation, local effects</li> </ol>
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	180 mg/kg bw/ day	<ol> <li>DNEL worker</li> <li>Long-term - dermal, systemic effects</li> </ol>
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	108 mg/kg bw/ day	<ol> <li>DNEL Consumer</li> <li>Long-term - dermal, systemic effects</li> </ol>
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	1.6 mg/kg bw/ day	<ol> <li>DNEL Consumer</li> <li>Long-term - oral, systemic effects</li> </ol>
<b>zinc oxide</b> CAS No.: 1314-13-2 EC No.: 215-222-5	5 mg/m <sup>3</sup>	<ol> <li>DNEL worker</li> <li>Long-term - inhalation, systemic effects</li> </ol>
<b>zinc oxide</b> CAS No.: 1314-13-2 EC No.: 215-222-5	2.5 mg/m <sup>3</sup>	<ol> <li>DNEL Consumer</li> <li>Long-term - inhalation, systemic effects</li> </ol>
<b>zinc oxide</b> CAS No.: 1314-13-2 EC No.: 215-222-5	0.5 mg/m <sup>3</sup>	<ol> <li>DNEL worker</li> <li>Long-term - inhalation, local effects</li> </ol>
<b>zinc oxide</b> CAS No.: 1314-13-2 EC No.: 215-222-5	83 mg/kg bw/ day	<ol> <li>DNEL Consumer</li> <li>Long-term - dermal, systemic effects</li> </ol>

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 4 Jan 2023 Print date: 24 Jan 2023 Version: 1



Page 7/16

## Zinc 240 500ml

DNEL value	① DNEL type
	<ul><li>② Exposure route</li></ul>
0.83 mg/kg	① DNEL Consumer
bw/day	<ul> <li>Direct consumer</li> <li>Long-term - oral, systemic effects</li> </ul>
500 mg/m <sup>3</sup>	① DNEL worker
	② Long-term – inhalation, systemic effects
89 mg/m³	① DNEL Consumer
	② Long-term – inhalation, systemic effects
	① DNEL worker
	② Long-term - dermal, systemic effects
	-
	② Long-term - dermal, systemic effects
26 mg/kg bw/	① DNEL Consumer
udy	② Long-term - oral, systemic effects
PNEC Value	① PNEC type
6.1 mg/L	<ol> <li>PNEC aquatic, marine water</li> </ol>
52 mg/L	<ol> <li>PNEC sewage treatment plant</li> </ol>
118 mg/L	① PNEC sediment, freshwater
56.5 mg/L	① PNEC sediment, marine water
56.6 mg/kg	1 PNEC soil
1.06 mg/L	<ol> <li>PNEC aquatic, marine water</li> </ol>
30.4 mg/L	① PNEC sediment, freshwater
3.04 mg/L	① PNEC sediment, marine water
29.5 mg/kg	① PNEC soil
0.327 mg/L	① PNEC aquatic, marine water
6.58 mg/L	(1) PNEC sewage treatment plant
12.46 mm//	
12.40 mg/L	<ol> <li>PNEC sediment, freshwater</li> </ol>
12.46 mg/L	① PNEC sediment, marine water
2.31 mg/kg	① PNEC soil
	0.83 mg/kg         0.83 mg/kg         bw/day         500 mg/m³         89 mg/m³         888 mg/kg bw/         319 mg/kg bw/         day         26 mg/kg bw/         day         26 mg/kg bw/         day         26 mg/kg bw/         day         26 mg/kg bw/         day         52 mg/L         118 mg/L         56.5 mg/L         56.6 mg/kg         1.06 mg/L         30.4 mg/L         3.04 mg/L         29.5 mg/kg         0.327 mg/L         6.58 mg/L         12.46 mg/L         12.46 mg/L

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 4 Jan 2023 Print date: 24 Jan 2023 Version: 1



Page 8/16

## Zinc 240 500ml

Substance name	PNEC Value	① PNEC type
<b>zinc oxide</b> CAS No.: 1314-13-2 EC No.: 215-222-5	6.1 mg/L	① PNEC aquatic, marine water
<b>zinc oxide</b> CAS No.: 1314-13-2 EC No.: 215-222-5	52 mg/L	① PNEC sewage treatment plant
<b>zinc oxide</b> CAS No.: 1314-13-2 EC No.: 215-222-5	117 mg/L	① PNEC sediment, freshwater
<b>zinc oxide</b> CAS No.: 1314-13-2 EC No.: 215-222-5	56.5 mg/L	<ol> <li>PNEC sediment, marine water</li> </ol>
<b>zinc oxide</b> CAS No.: 1314-13-2 EC No.: 215-222-5	35.6 mg/kg	① PNEC soil

## 8.2. Exposure controls

## 8.2.1. Appropriate engineering controls

No further details. See section 7.

## 8.2.2. Personal protection equipment



## Eye/face protection:

Safety goggles (EN-166)

## Skin protection:

Hand protection:

Wear gloves for protection against chemicals according to EN 374.

Gloves / solvent resistant

Breakthrough times and swelling properties of the material must be taken into consideration. Glove material:

The selection of a suitable glove depends not only on the material but also on other quality features and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of glove materials cannot be calculated in advance and must therefore be checked before use. Nitrilkautschuk Recommended material thickness:  $\geq 0.5$  mm

Permeation time (maximum wear duration):

For continuous contact we recommend gloves with a breakthrough time of at least 240 minutes, with the preference for a breakthrough time greater than 480 minutes. For short term or splash protection we recommend the same. We are aware that suitable gloves offering this protection are not available. In this case, a shorter breakthrough time is permissible, provided the procedures for maintenance and timely replacement are followed. The thickness of the gloves is not a good measure of the resistance the gloves give against a chemical substance, as this depends on the exact composition of the material of the gloves. The exact breakthrough time should be checked with the glove manufacturer and adhered to. Body protection:

Use protective suit. (EN-13034/6

Antistatic, chemical and oil resistant clothing and safety shoes are recommended. (EN1149; EN340&EN ISO 13688 EN13034-6).

### Respiratory protection:

BEI insufficient ventilation Respiratory protection Filter A2/P2

#### Other protection measures:

General protective and hygienic measures: Keep away from food, drink and animal feed. Remove contaminated, saturated clothing immediately. Wash hands before breaks and after work. Avoid contact with eyes and skin. General ventilation.

### 8.2.3. Environmental exposure controls

Use a suitable container to prevent environmental pollution.

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 4 Jan 2023 Print date: 24 Jan 2023 Version: 1

Page 9/16

Zinc 240 500ml

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

#### Appearance

**Physical state:** Aerosol **Odour:** characteristic

Colour: grey

## Safety relevant basis data

Parameter	Value	at °C	1 Method
			② Remark
рН	not applicable		② Mixture is not polar/aprotic.
Melting point	not determined		
Freezing point	not determined		
Initial boiling point and boiling range	-24.8 °C	1	
Decomposition temperature	not determined		
Flash point	-41 °C		
Evaporation rate	not determined		
Auto-ignition temperature	465 °C		
Upper/lower flammability or explosive limits	1 - 13 Vol-%		
Vapour pressure	5,000 hPa	20 °C	
Vapour density	not determined		
Density	1.042 g/cm <sup>3</sup>	20 °C	
Relative density	not determined		
Bulk density	not determined		
Water solubility	not applicable		② Not miscible or only slightly miscible.
Partition coefficient: n-octanol/water	not determined	1	
Dynamic viscosity	not determined		
Kinematic viscosity	not determined		

### 9.2. Other information

The product is not self-igniting. The product is not explosive, but the formation of explosive vapour/air mixtures is possible. formation of explosive vapour/air mixtures is possible.

## 9.2.1. Information with regard to physical hazard classes

**Explosives:** Not applicable Flammable gases: Not applicable Aerosols: Not applicable **Oxidizing gases:** Not applicable Gases under pressure: Not applicable Flammable liquids: Not applicable Flammable solids: Not applicable Self-reactive substances and mixtures: Not applicable **Pyrophoric liquids:** Not applicable **Pyrophoric solids:** Not applicable



according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 4 Jan 2023 Print date: 24 Jan 2023 Version: 1

Page 10/16

## Zinc 240 500ml



## Self-heating substances and mixtures:

Not applicable

Substances or mixtures which, in contact with water, emit flammable gases:

Not applicable Oxidizing liquids:

Not applicable

Oxidizing solids: Not applicable

Organic peroxides: Not applicable

Corrosive to metals: Not applicable

**Desensitised explosives:** Not applicable

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

### 10.1. Reactivity

No further relevant information available.

## 10.2. Chemical stability

Thermal decomposition / Conditions to avoid No decomposition when used as directed.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known.

## 10.4. Conditions to avoid

No further relevant information available.

## 10.5. Incompatible materials

No further relevant information available.

### 10.6. Hazardous decomposition products

No dangerous decomposition products known.

## **SECTION 11: Toxicological information**

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

Zinc powder - Zinc dust (stabilised) CAS No.: 7440-66-6 EC No.: 231-175-3	
LD <sub>50</sub> oral: >2,000 mg/kg (Ratte)	
LC <sub>50</sub> Acute inhalation toxicity (gas): >5.4 ppmV 4 h (Ratte)	
Acetone CAS No.: 67-64-1	
<b>LD<sub>50</sub> oral:</b> 5,800 mg/kg (Rat)	
LD <sub>50</sub> dermal: >20 mg/kg (Rat)	
LC <sub>50</sub> Acute inhalation toxicity (gas): >20 ppmV 4 h (Rat)	
Hydrocarbons, C9, aromatics CAS No.: 128601-23-0 EC No.: 918-668-5	
LD <sub>50</sub> oral: 3,492 mg/kg (Ratte)	
LD <sub>50</sub> dermal: >3,160 mg/kg (Kaninchen)	
LC <sub>50</sub> Acute inhalation toxicity (gas): >6,193 ppmV 4 h (Ratte)	
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	
<b>LD<sub>50</sub> oral:</b> 3,523 mg/kg (Ratte)	
LD <sub>50</sub> dermal: 12,126 mg/kg (Kaninchen)	
LC <sub>50</sub> Acute inhalation toxicity (gas): 27,124 ppmV 4 h (Ratte)	
zinc oxide CAS No.: 1314-13-2 EC No.: 215-222-5	
<b>LD<sub>50</sub> oral:</b> >5,000 mg/kg (Rat)	
LD <sub>50</sub> dermal: >2,000 mg/kg (Rat)	
LC <sub>50</sub> Acute inhalation toxicity (gas): >5,700 ppmV 4 h (Rat)	
	en / A

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 4 Jan 2023 Print date: 24 Jan 2023 Version: 1

## Zinc

Page 11/16	world of innov
Zinc 240 500ml	
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	
LD <sub>50</sub> oral: 5,280 mg/kg (Ratte)	
LD <sub>50</sub> dermal: >2,000 mg/kg (Kaninchen)	
LC <sub>50</sub> Acute inhalation toxicity (gas): >25 ppmV 4 h (Ratte)	
LC <sub>50</sub> Acute inhalation toxicity (vapour): 47.5 mg/L 4 h (Rat)	
Acute oral toxicity:	
Based on available data, the classification criteria are not met.	
Acute dermal toxicity:	
Based on available data, the classification criteria are not met.	
Acute inhalation toxicity:	
Based on available data, the classification criteria are not met.	
Skin corrosion/irritation: Based on available data, the classification criteria are not met.	
Serious eye damage/irritation:	
Causes serious eye irritation.	
Respiratory or skin sensitisation:	
Based on available data, the classification criteria are not met.	
Germ cell mutagenicity:	
Based on available data, the classification criteria are not met.	
Carcinogenicity:	
Based on available data, the classification criteria are not met.	
Reproductive toxicity:	
Based on available data, the classification criteria are not met.	
STOT-single exposure: May cause drowsiness or dizziness.	
STOT-repeated exposure: Based on available data, the classification criteria are not met.	
Aspiration hazard:	
Based on available data, the classification criteria are not met.	
11.2. Information on other hazards	
Endocrine disrupting properties:	
None of the ingredients are included.	

**SECTION 12: Ecological information** 

## 12.1. Toxicity

dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8		
LC <sub>50</sub> : >4,000 mg/L 2 d (daphnia magna)		
<b>EC<sub>50</sub>:</b> 155 mg/L 4 d		
Zinc powder - Zinc dust (stabilised) CAS No.: 7440-66-6 EC No.: 231-175-3		
LC <sub>50</sub> : 0.17 mg/L 4 d (Oncorhynchus mykiss)		
EC <sub>50</sub> : 0.41 mg/L 2 d (Daphnia magna)		
NOEC: 0.017 mg/L 3 d (Pseudokirchneriella subcapitata)		
Acetone CAS No.: 67-64-1		
EC <sub>50</sub> : 8,800 mg/L (crustaceans, Daphnia magna)		
EC <sub>50</sub> : 8,300 mg/L (fish)		
EC <sub>50</sub> : 8,800 mg/L (Daphnia magna)		
<b>LC<sub>50</sub>:</b> 8,300 mg/L 4 d		
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0		
LC <sub>50</sub> : 8.9 – 16.4 mg/L 4 d (fish, Pimephales promelas)		
EC <sub>50</sub> : 3.2 – 9.5 mg/L 2 d (crustaceans, Daphnia magna)		
NOEC: 0.44 mg/L 3 d (Algae/water plant)		
en / AT		

TECH MAST

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 4 Jan 2023 Print date: 24 Jan 2023 Version: 1 TECH MASTERS

Page 12/16

Zinc 240 500ml

zinc oxide CAS No.: 1314-13-2 EC No.: 215-222-5

LC<sub>50</sub>: 1.1 mg/L 4 d (fish, Oncorhynchus mykiss)

IC50: 1.85 mg/L 4 d (Algae/water plant, Skeletonema costatum)

IC<sub>50</sub>: 1.85 mg/L 4 d (Algae/water plant, Skeletonema costatum)

propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7

**LC<sub>50</sub>:** 9,640 mg/L 4 d (fish, Pimephales promelas)

**LC<sub>50</sub>:** >1,000 mg/L 4 d (fish)

**LC<sub>50</sub>:** 10,000 mg/L (fish)

EC<sub>50</sub>: >100 mg/L (Algae/water plant)

EC<sub>50</sub>: >100 mg/L 2 d (crustaceans, Daphnia magna)

EC50: >1,000 mg/L 2 d (crustaceans)

**ErC<sub>50</sub>:** >100 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus)

LOEC: 1,000 mg/L (Algae/water plant, Algae)

## 12.2. Persistence and degradability

propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7

Biodegradation: Yes, rapidly

#### **Biodegradation:**

Not readily biodegradable.

#### 12.3. Bioaccumulative potential

 zinc oxide
 CAS No.: 1314-13-2
 EC No.: 215-222-5

 Bioconcentration factor (BCF): 28,960

 propan-2-ol
 CAS No.: 67-63-0
 EC No.: 200-661-7

## Log K<sub>OW</sub>: 0.05

Accumulation / Evaluation: No further relevant information available.

### 12.4. Mobility in soil

No further relevant information available.

### 12.5. Results of PBT and vPvB assessment

dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8 Results of PBT and vPvB assessment: — Zinc powder - Zinc dust (stabilised) CAS No.: 7440-66-6 EC No.: 231-175-3 Results of PBT and vPvB assessment: — Acetone CAS No.: 67-64-1 Results of PBT and vPvB assessment: — Hydrocarbons, C9, aromatics CAS No.: 128601-23-0 EC No.: 918-668-5 Results of PBT and vPvB assessment: — Reaction mass of ethylbenzene and xylene EC No.: 905-588-0 Results of PBT and vPvB assessment: zinc oxide CAS No.: 1314-13-2 EC No.: 215-222-5 Results of PBT and vPvB assessment: propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7 Results of PBT and vPvB assessment: —

The product does not meet the PBT/vPvB criteria.

#### 12.6. Endocrine disrupting properties

The product does not contain any substances with endocrine-disrupting properties.

### **12.7. Other adverse effects**

Very toxic to aquatic life.

Toxic to fish.

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 4 Jan 2023 Print date: 24 Jan 2023 Version: 1

Page 13/16

## Zinc 240 500ml

Do not allow to enter into surface water or drains. Drinking water hazard even when small quantities leak into the subsoil.

## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

Must not be disposed of together with household waste.

#### 13.1.1. Product/Packaging disposal

## Waste codes/waste designations according to EWC/AVV

D	Directive 2008/98/EC (Waste Framework Directive)		
	HP 3	Flammable	
	HP 4	Irritant — skin irritation and eye damage	
	HP 14	Ecotoxic	

### Waste treatment options

#### Other disposal recommendations:

Uncleaned packaging: Dispose of waste according to applicable legislation.

## **SECTION 14: Transport information**

			1
Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or	ID number	·	•
UN 1950	UN 1950	UN 1950	UN 1950
14.2. UN proper ship	ping name	^	
AEROSOLS, ENVIRONMENTALLY HAZARDOUS	AEROSOLS, ENVIRONMENTALLY HAZARDOUS	AEROSOLS, MARINE POLLUTANT	AEROSOLS, flammable
14.3. Transport haza	rd class(es)		• •
	No data available	*	
2.1		2.1	2.1
14.4. Packing group			
		-	
14.5. Environmental	hazards		
₹ <u>₹</u> 2	No data available	MARINE POLLUTANT	No data available
14.6. Special precau	tions for user	•	
Special Provisions: 190   327   344   625 Limited quantity (LQ): 1L Classification code: 5F Tunnel restriction code: (D) Remark: Attention: Gases	Special Provisions: 190   327   344   625 Limited quantity (LQ): 1L Classification code: 5F Remark: Attention: Gases	Special Provisions:           63   190   277   327   344             381   959           Limited quantity (LQ):           1L           Excepted Quantities           (EQ):           E0           EmS-No.:           F-D,S-U           Remark:           Attention: Gases	Remark: Attention: Gases

#### **14.7. Maritime transport in bulk according to IMO instruments** No data available



according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 4 Jan 2023 Print date: 24 Jan 2023 Version: 1

Page 14/16

Zinc 240 500ml

## **SECTION 15: Regulatory information**

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

## 15.1.1. EU legislation

#### Authorisations:

Directive 2012/18/EU

Named dangerous substances - ANNEX I: None of the ingredients are included.

#### Restrictions on use:

Regulation (EC) No 1907/2006 ANNEX XVII: Restriction conditions: 3 Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment - Annex II: None of the ingredients are included.

Regulation (EU) 2019/1148

Annex I - RESTRICTED EXPORT SUBSTANCES FOR EXPLOSIVES (upper concentration limit for a permit pursuant to Article 5(3)): None of the ingredients are included.

Annex II - EXPLOSIVES REPORTABLE FOR EXPLOSIVES: Acetone

Regulation (EC) No 273/2004 on drug precursors: Acetone

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade in drug precursors between the Community and third countries: Acetone

#### Other regulations (EU):

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive], Hazard categories:

• P3a 'Flammable' aerosols Category 1 or 2, containing flammable gases Category 1 or 2 or flammable liquids

• E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

**Directive 2004/42/EC on the limitation of emissions of volatile organic compounds:** Volatile organic compounds (VOC) content in percent by weight: 671.1 g/L

## 15.1.2. National regulations

No data available

## 15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out.

## **SECTION 16: Other information**

### 16.1. Indication of changes

No data available

### 16.2. Abbreviations and acronyms

- ACGIH American Conference of Governmental Industrial Hygienists
- 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
- BCF Bioconcentration Factor
- CAS Chemical Abstracts Service
- CLP Classification, Labelling and Packaging
- DNEL derived no-effect level
- EC<sub>50</sub> Effective Concentration 50%
- EN European Standard
- ES Exposure scenario
- EWC European Waste Catalogue
- IC<sub>50</sub> Inhibition Concentration 50 %

ICAO International Civil Aviation Organization

IMDG International Maritime Dangerous Goods

- IMO International Maritime Organization
- KG body weight

LC<sub>50</sub> Lethal (fatal) Concentration 50%

LD<sub>50</sub> Lethal (fatal) Dose 50%



according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 4 Jan 2023 Print date: 24 Jan 2023 Version: 1

Page 15/16

Zinc 240 500ml



MAK	Maximum concentration in the workplace air (CH)
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety & Health
NOEC	No Observed Effect Concentration
OEL	Threshold Limit Value
OSHA	Occupational Safety & Health Administration
PBT	persistent and bioaccumulative and toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation and Authorization of Chemicals
RID	Dangerous goods regulations for transport by rail
TRGS	Technische Regeln für Gefahrstoffe
UN	United Nations
VOC	Volatile organic compounds
	central nervous system

ZNS central nervous system

## 16.3. Key literature references and sources for data

No data available

# 16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Hazardous to the aquatic environment (Aquatic Acute 1)	H400: Very toxic to aquatic life.	
Hazardous to the aquatic environment (Aquatic Chronic 1)	H410: Very toxic to aquatic life with long lasting effects.	
Serious eye damage/eye irritation (Eye Irrit. 2)	H319: Causes serious eye irritation.	
STOT-single exposure (STOT SE 3)	H336: May cause drowsiness or dizziness.	
Aerosols (Aerosol 1)	H222; H229: Extremely flammable aerosol. Pressurised container: May burst if heated.	

## 16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
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.
Supplementa	I hazard information
EUH066	Repeated exposure may cause skin dryness or cracking.

### 16.6. Training advice

No data available

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878 Revision date: 4 Jan 2023 Print date: 24 Jan 2023 Version: 1



Page 16/16

Zinc 240 500ml

## 16.7. Additional information

No data available