Zinc 240 500ml

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:

KANDO Service GmbH
Hartleitnerstraße 3
4653 Eberstalzell
Austria
Telephone: +43 (0) 7241 213 79
E-mail: msds@kando.eu

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

2.2. Label elements

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

Hazard pictograms:



GHS09
Environment



GHS07
Exclamation mark



GHS02
Flame

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.
H336	May cause drowsiness or dizziness.

Hazard statements for environmental hazards	
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

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3.2. Mixtures

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.

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
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 (stabilized)** Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410) Warning **Acute Toxicity Estimate** ATE (oral) > 2,000 mg/kg ATE (inhalation, gases) > 5.4 ppmV ATE (inhalation, vapour) > 5.4 mg/L	25 – < 50 %
CAS No.: 115-10-6 EC No.: 204-065-8 Index No.: 603-019-00-8 REACH No.: 01-2119472128-37	**dimethyl ether** Flam. Gas 1A (H220), Press. Gas (Comp.) (H280) Danger **Acute Toxicity Estimate** ATE (oral) > 2,000 mg/kg ATE (dermal) > 2,000 mg/kg ATE (inhalation, gases) 308.5 ppmV ATE (inhalation, dust/mist) 308.5 mg/L	25 – < 50 %
CAS No.: 67-64-1 EC No.: 200-662-2 Index No.: 606-001-00-8 REACH No.: 01-2119471330-49	**acetone** Eye Irrit. 2 (H319), Flam. Liq. 2 (H225), STOT SE 3 (H336) Danger EUH066 **Acute Toxicity Estimate** ATE (oral) 5,800 mg/kg ATE (dermal) 20,000 mg/kg ATE (inhalation, gases) 76 ppmV ATE (inhalation, vapour) 76 mg/L ATE (inhalation, dust/mist) 76 mg/L **Additional information:** EUH066	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) Danger **Acute Toxicity Estimate** ATE (oral) 3,492 mg/kg ATE (dermal) > 3,160 mg/kg ATE (inhalation, gases) > 6,193 ppmV ATE (inhalation, vapour) > 6,193 mg/L **Additional information:** EUH066	2.5 – < 10 %
EC No.: 905-588-0 REACH No.: 01-2119488216-32	**Reaction mass of ethylbenzene and xylene** Acute Tox. 4 (H312, H332), Aquatic Chronic 3 (H412), Asp. Tox. 1 (H304), Eye Irrit. 2 (H319), Flam. Liq. 3 (H226), STOT RE 2 (H373), STOT SE 3 (H335), Skin Irrit. 2 (H315) Danger **Acute Toxicity Estimate** ATE (oral) > 3,523 mg/kg ATE (dermal) 1,100 mg/kg ATE (inhalation, gases) 27.571 ppmV ATE (inhalation, vapour) 11 mg/L	2.5 – < 10 %

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
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)  Danger **Acute Toxicity Estimate** ATE (oral) > 2,000 mg/kg ATE (dermal) > 2,000 mg/kg ATE (inhalation, gases) > 25 ppmV ATE (inhalation, vapour) > 20 mg/L ATE (inhalation, dust/mist) 46,600 mg/L	1 – < 2.5 %
CAS No.: 1330-20-7 EC No.: 215-535-7 Index No.: 601-022-00-9 REACH No.: 01-2119488216-32	**xylene** Acute Tox. 4 (H332, H312), Asp. Tox. 1 (H304), Eye Irrit. 2 (H319), Flam. Liq. 3 (H226), STOT RE 2 (H373), STOT SE 3 (H335), Skin Irrit. 2 (H315)  Danger **Acute Toxicity Estimate** ATE (oral) 4,300 mg/kg ATE (dermal) 12,126 mg/kg ATE (inhalation, gases) 29,000 ppmV ATE (inhalation, vapour) 29 mg/L ATE (inhalation, dust/mist) 6,350 mg/L	1 – < 2.5 %
CAS No.: 100-41-4 EC No.: 202-849-4 Index No.: 601-023-00-4 REACH No.: 01-2119489370-35	**ethylbenzene** Acute Tox. 4 (H332), Aquatic Chronic 3 (H412), Asp. Tox. 1 (H304), Flam. Liq. 2 (H225), STOT RE 2 (H373)  Danger **Acute Toxicity Estimate** ATE (oral) 3,500 mg/kg ATE (dermal) 15,354 mg/kg ATE (inhalation, gases) 17.2 ppmV ATE (inhalation, dust/mist) 17.2 mg/L	0.1 – < 1 %
CAS No.: 7439-92-1 EC No.: 231-100-4 Index No.: 082-013-00-1	**Lead, in powder form** *Candidate List of Substances of Very High Concern for Authorisation!* Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Lact. (H362), Repr. 1A (H360FD)  Danger M-factor (acute): 10 M-factor (chronic): 100 **Specific concentration limit (SCL)** Repr. 1A; H360D: C ≥ 0.03%	≥ 0.0025 – < 0.025 %

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 data available

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water mist, Extinguishing powder, Carbon dioxide, alcohol resistant foam

Unsuitable extinguishing media:
Water in full jet

5.2. Special hazards arising from the substance or mixture

No data 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)

No data available

SECTION 8: Exposure controls/personal protection

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8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
MAK (AT)	**dimethyl ether** CAS No.: 115-10-6 EC No.: 204-065-8	① 1,000 ppm (1,910 mg/m³)
MAK (AT)	**dimethyl ether** CAS No.: 115-10-6 EC No.: 204-065-8	② 2,000 ppm (3,820 mg/m³) ⑤ (max. 3x60 min./Schicht, Momentanwert) 60(Mow); 3x
IOELV (EU)	**dimethyl ether** CAS No.: 115-10-6 EC No.: 204-065-8	① 1,000 ppm (1,920 mg/m³)
MAK (AT)	**acetone** CAS No.: 67-64-1 EC No.: 200-662-2	② 2,000 ppm (4,800 mg/m³) ⑤ (max. 4x15 min./Schicht) 15(Miw); 4x
IOELV (EU)	**acetone** CAS No.: 67-64-1 EC No.: 200-662-2	① 500 ppm (1,210 mg/m³)
MAK (AT)	**acetone** CAS No.: 67-64-1 EC No.: 200-662-2	① 500 ppm (1,200 mg/m³)
MAK (AT) from 25 Sept 2018	**Reaction mass of ethylbenzene and xylene** EC No.: 905-588-0	② 100 ppm (442 mg/m³) ⑤ (max. 4x15 min./Schicht)
IOELV (EU)	**Reaction mass of ethylbenzene and xylene** EC No.: 905-588-0	① 50 ppm (221 mg/m³) ② 100 ppm (442 mg/m³) ⑤ (may be absorbed through the skin)
MAK (AT) from 25 Sept 2018	**Reaction mass of ethylbenzene and xylene** EC No.: 905-588-0	① 50 ppm (221 mg/m³)
MAK (AT)	**propan-2-ol** CAS No.: 67-63-0 EC No.: 200-661-7	② 800 ppm (2,000 mg/m³) ⑤ (max. 4x15 min./Schicht)
MAK (AT)	**propan-2-ol** CAS No.: 67-63-0 EC No.: 200-661-7	① 200 ppm (500 mg/m³)
MAK (AT) from 25 Sept 2018	**xylene** CAS No.: 1330-20-7 EC No.: 215-535-7	② 100 ppm (442 mg/m³) ⑤ (max. 4x15 min./Schicht)
IOELV (EU)	**xylene** CAS No.: 1330-20-7 EC No.: 215-535-7	① 50 ppm (221 mg/m³) ② 100 ppm (442 mg/m³) ⑤ (may be absorbed through the skin)
MAK (AT) from 25 Sept 2018	**xylene** CAS No.: 1330-20-7 EC No.: 215-535-7	① 50 ppm (221 mg/m³)
MAK (AT)	**ethylbenzene** CAS No.: 100-41-4 EC No.: 202-849-4	① 100 ppm (440 mg/m³) ⑤ (kann über die Haut aufgenommen werden) H

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
MAK (AT)	**ethylbenzene** CAS No.: 100-41-4 EC No.: 202-849-4	② 200 ppm (880 mg/m³) ⑤ (max. 8x5 min./Schicht, Momentanwert, kann über die Haut aufgenommen werden) 5(Mow); 8x; H
IOELV (EU)	**ethylbenzene** CAS No.: 100-41-4 EC No.: 202-849-4	① 100 ppm (442 mg/m³) ② 200 ppm (884 mg/m³) ⑤ (may be absorbed through the skin)
BOELV (EU) from 8 Apr 2024	**Lead, in powder form** CAS No.: 7439-92-1 EC No.: 231-100-4	① 0.03 mg/m³ ⑤ (inhalable fraction)
MAK (AT) from 1 Jan 2026	**Lead, in powder form** CAS No.: 7439-92-1 EC No.: 231-100-4	② 0.12 mg/m³ ⑤ (max. 4x15 min./Schicht) Kat 1A F,D,L; E; 15(Miw); 4x
MAK (AT) from 1 Jan 2026	**Lead, in powder form** CAS No.: 7439-92-1 EC No.: 231-100-4	① 0.03 mg/m³ ⑤ Kat 1A F,D,L; E

8.1.2. Biological limit values

Limit value type (country of origin)	Substance name	Limit value	① Parameter ② Test material ③ Time of sampling: ④ Remark
BLV (EU) from 8 Apr 2024	**Lead, in powder form** CAS No.: 7439-92-1 EC No.: 231-100-4	30 µg/100mL	① Lead ② blood ③ no restriction
BLV (EU) from 1 Jan 2029	**Lead, in powder form** CAS No.: 7439-92-1 EC No.: 231-100-4	15 µg/100mL	① Lead ② blood ③ no restriction

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
Zinc Powder - Zinc Dust (stabilized) CAS No.: 7440-66-6 EC No.: 231-175-3	5 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
Zinc Powder - Zinc Dust (stabilized) CAS No.: 7440-66-6 EC No.: 231-175-3	2.5 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
Zinc Powder - Zinc Dust (stabilized) CAS No.: 7440-66-6 EC No.: 231-175-3	5,000 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Zinc Powder - Zinc Dust (stabilized) CAS No.: 7440-66-6 EC No.: 231-175-3	5,000 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
Zinc Powder - Zinc Dust (stabilized) CAS No.: 7440-66-6 EC No.: 231-175-3	50 mg/kg bw/day	① DNEL worker ② Long-term - oral, systemic effects
dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	1,894 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects

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Substance name	DNEL value	① DNEL type ② Exposure route
dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	471 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
acetone CAS No.: 67-64-1 EC No.: 200-662-2	1,210 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
acetone CAS No.: 67-64-1 EC No.: 200-662-2	200 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
acetone CAS No.: 67-64-1 EC No.: 200-662-2	2,420 mg/m³	① DNEL worker ② Acute - inhalation, local effects
acetone CAS No.: 67-64-1 EC No.: 200-662-2	186 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
acetone CAS No.: 67-64-1 EC No.: 200-662-2	62 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
acetone CAS No.: 67-64-1 EC No.: 200-662-2	62 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
Hydrocarbons, C9, aromatics CAS No.: 128601-23-0 EC No.: 918-668-5	100 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
Hydrocarbons, C9, aromatics CAS No.: 128601-23-0 EC No.: 918-668-5	32 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
Hydrocarbons, C9, aromatics CAS No.: 128601-23-0 EC No.: 918-668-5	25 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Hydrocarbons, C9, aromatics CAS No.: 128601-23-0 EC No.: 918-668-5	11 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
Hydrocarbons, C9, aromatics CAS No.: 128601-23-0 EC No.: 918-668-5	11 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	77 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	14.8 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	289 mg/m³	① DNEL worker ② Acute - inhalation, local effects
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	180 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	108 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	1.6 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	500 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects

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Substance name	DNEL value	① DNEL type ② Exposure route
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	89 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	888 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	319 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	26 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	221 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	65.3 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	442 mg/m³	① DNEL worker ② Acute - inhalation, systemic effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	260 mg/m³	① DNEL Consumer ② Acute - inhalation, systemic effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	221 mg/m³	① DNEL worker ② Long-term – inhalation, local effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	65.3 mg/m³	① DNEL Consumer ② Long-term – inhalation, local effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	442 mg/m³	① DNEL worker ② Acute - inhalation, local effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	260 mg/m³	① DNEL Consumer ② Acute - inhalation, local effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	212 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	125 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	12.5 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	77 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	15 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	293 mg/m³	① DNEL worker ② Acute - inhalation, local effects
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	180 mg/kg	① DNEL worker ② Long-term - dermal, systemic effects

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Substance name	DNEL value	① DNEL type ② Exposure route
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	1.6 mg/kg	① DNEL Consumer ② Long-term - oral, systemic effects

Substance name	PNEC Value	① PNEC type
Zinc Powder - Zinc Dust (stabilized) CAS No.: 7440-66-6 EC No.: 231-175-3	6.1 mg/L	① PNEC aquatic, marine water
Zinc Powder - Zinc Dust (stabilized) CAS No.: 7440-66-6 EC No.: 231-175-3	52 mg/L	① PNEC sewage treatment plant
Zinc Powder - Zinc Dust (stabilized) CAS No.: 7440-66-6 EC No.: 231-175-3	118 mg/L	① PNEC sediment, freshwater
Zinc Powder - Zinc Dust (stabilized) CAS No.: 7440-66-6 EC No.: 231-175-3	56.5 mg/L	① PNEC sediment, marine water
Zinc Powder - Zinc Dust (stabilized) CAS No.: 7440-66-6 EC No.: 231-175-3	56.6 mg/kg	① PNEC soil
dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	0.155 mg/L	① PNEC aquatic, freshwater
dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	0.016 mg/L	① PNEC aquatic, marine water
dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	0.681 mg/kg	① PNEC sediment, freshwater
dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	0.069 mg/kg	① PNEC sediment, marine water
dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	0.045 mg/kg	① PNEC soil
dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	1.549 mg/L	① PNEC aquatic, intermittent release
acetone CAS No.: 67-64-1 EC No.: 200-662-2	10.6 mg/L	① PNEC aquatic, freshwater
acetone CAS No.: 67-64-1 EC No.: 200-662-2	1.06 mg/L	① PNEC aquatic, marine water
acetone CAS No.: 67-64-1 EC No.: 200-662-2	100 mg/L	① PNEC sewage treatment plant
acetone CAS No.: 67-64-1 EC No.: 200-662-2	30.4 mg/kg	① PNEC sediment, freshwater
acetone CAS No.: 67-64-1 EC No.: 200-662-2	3.04 mg/kg	① PNEC sediment, marine water
acetone CAS No.: 67-64-1 EC No.: 200-662-2	29.5 mg/kg	① PNEC soil
acetone CAS No.: 67-64-1 EC No.: 200-662-2	21 mg/L	① PNEC aquatic, intermittent release

Substance name	PNEC Value	① PNEC type
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	0.327 mg/L	① PNEC aquatic, marine water
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	6.58 mg/L	① PNEC sewage treatment plant
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	12.46 mg/L	① PNEC sediment, freshwater
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	12.46 mg/L	① PNEC sediment, marine water
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	2.31 mg/kg	① PNEC soil
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	140.9 mg/L	① PNEC aquatic, freshwater
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	140.9 mg/L	① PNEC aquatic, marine water
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	2,251 mg/L	① PNEC sewage treatment plant
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	552 mg/kg	① PNEC sediment, freshwater
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	552 mg/kg	① PNEC sediment, marine water
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	28 mg/kg	① PNEC soil
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	140.9 mg/L	① PNEC aquatic, intermittent release
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	0.1 mg/L	① PNEC aquatic, freshwater
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	0.01 mg/L	① PNEC aquatic, marine water
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	13.7 mg/kg	① PNEC sediment, freshwater
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	1.37 mg/kg	① PNEC sediment, marine water
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	2.68 mg/kg	① PNEC soil
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	0.1 mg/L	① PNEC aquatic, intermittent release

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, Selection of glove material considering breakthrough times, permeation rates and degradation.
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: ≥ 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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid
Form: Aerosol
Colour: grey
Odour: characteristic
flammability: No data available

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	*not applicable*		② Mixture is not polar/aprotic.
Melting point	*No data available*		
Freezing point	*No data available*		
Initial boiling point and boiling range	-24.8 °C		② dimethyl ether
Flash point	-42 °C		② dimethyl ether
Evaporation rate	*No data available*		

Parameter	Value	at °C	① Method ② Remark
Auto-ignition temperature	465 °C		
Upper/lower flammability or explosive limits	1 – 13 Vol-%		② Hydrocarbons, C9, aromatics - Acetone
Vapour pressure	5,000 hPa	20 °C	
Vapour density	*No data available*		
Density	1.04 g/cm³	20 °C	
Bulk density	*not applicable*		
Water solubility	completely miscible		
Dynamic viscosity	*No data available*		
Kinematic viscosity	*No data available*		

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.
Organic solvents: 64,3 %
Solid content: 34,2 %

9.2.1. Information with regard to physical hazard classes
Aerosols:
Extremely flammable aerosol. Pressurized container: May burst if heated.

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
Toxicological information

Acute Toxicity Estimate for Mixtures
ATE (inhalation, vapour): >200 mg/L
Zinc Powder - Zinc Dust (stabilized) CAS No.: 7440-66-6 EC No.: 231-175-3
LD_{50} oral: >2,000 mg/kg (Ratte)
LC_{50} Acute inhalation toxicity (gas): >5.4 ppmV 4 h (Ratte)
LC_{50} Acute inhalation toxicity (vapour): >5.4 mg/L 4 h (Rat)

dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	
LD_{50} oral: >2,000 mg/kg	
LD_{50} dermal: >2,000 mg/kg	
LC_{50} Acute inhalation toxicity (gas): 308.5 ppmV 4 h (Rat)	
LC_{50} Acute inhalation toxicity (dust/mist): 308.5 mg/L 4 h (Rat)	
acetone CAS No.: 67-64-1 EC No.: 200-662-2	
ATE (oral): 5,800 mg/kg	
ATE (dermal): 20,000 mg/kg	
ATE (inhalation, vapour): 76 mg/L	
ATE (inhalation, dust/mist): 76 mg/L	
LD_{50} oral: 5,800 mg/kg (Rat)	
LD_{50} dermal: >15,800 mg/kg (Rabbit)	
LC_{50} Acute inhalation toxicity (gas): 76 ppmV 4 h (Rat)	
LC_{50} Acute inhalation toxicity (vapour): 5,540 mg/L 4 d (Oncorhynchus mykiss (Rainbow trout))	
LC_{50} Acute inhalation toxicity (dust/mist): 76 mg/L 4 h (Rat)	
Hydrocarbons, C9, aromatics CAS No.: 128601-23-0 EC No.: 918-668-5	
LD_{50} oral: 3,492 mg/kg (Rat)	
LD_{50} dermal: >3,160 mg/kg (Rabbit)	
LC_{50} Acute inhalation toxicity (gas): >6,193 ppmV 4 h (Rat)	
LC_{50} Acute inhalation toxicity (vapour): >6,193 mg/L 4 h (Rat)	
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	
ATE (dermal): 1,100 mg/kg	
ATE (inhalation, vapour): 11 mg/L	
LD_{50} oral: >3,523 mg/kg (Rat)	
LD_{50} dermal: >2,000 mg/kg (Rabbit)	
LC_{50} Acute inhalation toxicity (gas): 27.571 ppmV 4 h (Rat)	
LC_{50} Acute inhalation toxicity (vapour): 29,000 mg/L 4 h (Rat)	
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	
LD_{50} oral: >2,000 mg/kg (Rat)	
LD_{50} dermal: >2,000 mg/kg (Rat)	
LC_{50} Acute inhalation toxicity (gas): >25 ppmV 4 h (Rat)	
LC_{50} Acute inhalation toxicity (vapour): >20 mg/L 6 h (Rat)	
LC_{50} Acute inhalation toxicity (dust/mist): 46,600 mg/L (Rat)	
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	
LD_{50} oral: 4,300 mg/kg (Rat)	
LD_{50} dermal: 12,126 mg/kg (Rabbit)	
LC_{50} Acute inhalation toxicity (gas): 29,000 ppmV 4 h (Rat)	
LC_{50} Acute inhalation toxicity (vapour): 29 mg/L 4 h (Rat)	
LC_{50} Acute inhalation toxicity (dust/mist): 6,350 mg/L 4 h (Rat)	
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	
LD_{50} oral: 3,500 mg/kg (Rat)	
LD_{50} dermal: 15,354 mg/kg (Rabbit)	
LC_{50} Acute inhalation toxicity (gas): 17.2 ppmV 4 h (Rat)	
LC_{50} Acute inhalation toxicity (dust/mist): 17.2 mg/L (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

Zinc Powder - Zinc Dust (stabilized) CAS No.: 7440-66-6 EC No.: 231-175-3
LC_{50}: 0.17 mg/L 4 d (Oncorhynchus mykiss)
EC_{50}: 0.41 mg/L 2 d (Daphnia magna)
NOEC: 0.017 mg/L 3 d (Pseudokirchneriella subcapitata)
LC_{50}: 0.41 mg/L 4 d (Oncorhynchus mykiss)
LC_{50}: 0.238 – 0.269 mg/L (fi2)
EC_{50}: 0.354 mg/L (dap)
EC_{50}: 0.17 mg/L 3 d (Selenastrum capricornutum)
NOEC: 0.178 mg/L 21 d (Palaemon elegans)
NOEC: 9 mg/L 3 d (Ceratophyllum demersum)
EC_{10}: 59.2 mg/L (Daphnia magna)
EC_{10}: 27.3 mg/L (Algae)
dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8
LC_{50}: >4,000 mg/L 2 d (crustaceans, Daphnia magna)
LC_{50}: >4,000 mg/L 4 d (fish)
EC_{50}: 155 mg/L 4 d (Algae/water plant)
LC_{50}: >4,000 mg/L 2 d (daphnia magna)
EC_{50}: 155 mg/L 4 d (Alge)
EC_{50}: 155 mg/L 4 d (algae)

acetone CAS No.: 67-64-1 EC No.: 200-662-2
LC_{50}: 8,300 mg/L 4 d (fish)
LC_{50}: 8,450 mg/L 2 d (crustaceans, water flea)
LC_{50}: 8,300 mg/L 4 d (fish)
EC_{50}: 7,200 mg/L 4 d (Algae/water plant)
EC_{50}: 7,200 mg/L 4 d (Alge)
EC_{50}: 8,800 mg/L 21 d (Daphnia magna)
NOEC: 2,212 mg/L (crustaceans, Daphnia magna)
NOEC: 2,212 mg/L (crustaceans, Daphnia pulex)
Hydrocarbons, C9, aromatics CAS No.: 128601-23-0 EC No.: 918-668-5
EC_{50}: 3.2 mg/L 2 d (crustaceans, Daphnia magna)
EC_{50}: 2.75 mg/L 3 d (Algae/water plant, Pseudokirchneriella Subcapitata)
EC_{50}: 9.2 mg/L 4 d (fish)
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0
LC_{50}: 8.9 – 16.4 mg/L 4 d (fish, Pimephales promelas)
EC_{50}: 3.2 – 9.5 mg/L 2 d (crustaceans, Daphnia magna)
NOEC: 0.44 mg/L 3 d (Algae/water plant)
LC_{50}: 2.6 mg/L 4 d (fish, Oncorhynchus mykiss)
EC_{50}: 2.2 mg/L 3 d (Algae/water plant, Chlorella vulgaris)
NOEC: >1.39 mg/L (fish, Oncorhynchus kisutch)
NOEC: 0.74 mg/L (crustaceans, Ceriodaphnia dubia)
LC_{50}: 8.9 – 16.4 mg/L 4 d (Pimephales promelas)
EC_{50}: 3.2 – 9.5 mg/L 2 d (Daphnia magna)
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7
LC_{50}: >1,000 mg/L 4 d (fish)
LC_{50}: 9,640 mg/L 4 d (fish, Pimephales promelas)
LC_{50}: 9,714 mg/L 1 d (Daphnia magna)
EC_{50}: >1,000 mg/L 2 d (crustaceans)
EC_{50}: >100 mg/L (Algae/water plant, Bacteria)
EC_{50}: >100 mg/L 2 d (crustaceans, Daphnia magna)
NOEC: >1,000 mg/L 28 d (fish, Danio rerio)
NOEC: >1,000 mg/L 21 d (crustaceans, Daphnia magna)
ErC_{50}: >100 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus)
ErC_{50}: >100 mg/L 3 d (Algae/water plant, Scenedesmus subspicatus)
LOEC: 1,000 mg/L (Alge)
LOEC: 1,000 mg/L (Algae/water plant, Algae)
LOEC: 1,000 mg/L (Algae)
xylene CAS No.: 1330-20-7 EC No.: 215-535-7
LC_{50}: 8.9 – 16.4 mg/L 4 d (fish, Pimephales promelas)
EC_{50}: 3.2 – 9.5 mg/L 2 d (crustaceans, Daphnia magna)
LC_{50}: 13.5 mg/L 4 d (fish)
EC_{50}: 7.4 mg/L 2 d (daphnia magna)
LC_{50}: >10 – 100 mg/L 4 d (fish)
EC_{50}: >10 – 100 mg/L 2 d (crustaceans)
NOEC: 1.3 mg/L (fish, Oncorhynchus mykiss)
NOEC: 1.17 mg/L (crustaceans, Ceriodaphnia dubia)

ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4
LC_{50}: 42.3 mg/L 4 d (fish, Pimephales promelas)
EC_{50}: 75 mg/L 2 d (crustaceans, Daphnia magna)
EC_{50}: 63 mg/L (Algae/water plant, Chlorella vulgaris)
NOEC: 0.96 mg/L (crustaceans, Ceriodaphnia dubia)
EC_{50}: 63 mg/L (Algae/water plant, Chlorella vulgaris)

12.2. Persistence and degradability

acetone CAS No.: 67-64-1 EC No.: 200-662-2
Biodegradation: Yes, rapidly
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7
Biodegradation: Yes, rapidly
Remark: Readily biodegradable (according to OECD criteria).

Biodegradation:
Not readily biodegradable.

*
12.3. Bioaccumulative potential

acetone CAS No.: 67-64-1 EC No.: 200-662-2
Log K_{OW}: -0.24
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0
Log K_{OW}: 3.16
Bioconcentration factor (BCF): 29
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7
Log K_{OW}: 0.05
xylene CAS No.: 1330-20-7 EC No.: 215-535-7
Log K_{OW}: 2.77
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4
Log K_{OW}: 3.15

12.4. Mobility in soil
No data available

*
12.5. Results of PBT and vPvB assessment

Zinc Powder - Zinc Dust (stabilized) CAS No.: 7440-66-6 EC No.: 231-175-3
Results of PBT and vPvB assessment: —
dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8
Results of PBT and vPvB assessment: —
acetone CAS No.: 67-64-1 EC No.: 200-662-2
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: —
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7
Results of PBT and vPvB assessment: —
xylene CAS No.: 1330-20-7 EC No.: 215-535-7
Results of PBT and vPvB assessment: —
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4
Results of PBT and vPvB assessment: —
Lead, in powder form CAS No.: 7439-92-1 EC No.: 231-100-4
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
water hazard class 2: obviously hazardous to water
Very toxic to aquatic life. Very toxic for fish. Also toxic to fish and plankton in water.
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. Do not allow to enter drains/surface water/ ground water.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV
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.
Recommended cleaning agent: Water, if necessary with the addition of cleaning agents.

SECTION 14: Transport information

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 shipping name			
AEROSOLS, ENVIRONMENTALLY HAZARDOUS (Hydrocarbons, C9, aromatics)	AEROSOLS, ENVIRONMENTALLY HAZARDOUS (Hydrocarbons, C9, aromatics)	AEROSOLS, MARINE POLLUTANT (Hydrocarbons, C9, aromatics)	AEROSOLS, flammable (Hydrocarbons, C9, aromatics)
14.3. Transport hazard class(es)			
 2.1	No data available	 2.1	 2.1
14.4. Packing group			
		-	
14.5. Environmental hazards			
	No data available	 MARINE POLLUTANT	No data available
* **14.6. Special precautions for user**			
Special Provisions: 190 | 327 | 344 | 625 **Limited quantity (LQ):** 1L **Excepted Quantities (EQ):** E0 **Classification code:** 5F	**Special Provisions:** 190 | 327 | 344 | 625 **Limited quantity (LQ):** 1L **Excepted Quantities (EQ):** E0 **Classification code:** 5F	**Special Provisions:** 63 | 190 | 277 | 327 | 344 | 381 | 959 **Limited quantity (LQ):** 1L **Excepted Quantities (EQ):** E0	**Remark:** Attention: Gases On passenger aircraft/rail: 75kg On cargo aircraft only: 150kg

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
Tunnel restriction code: (D) **Remark:** Attention: Gases Transport category 2	**Remark:** Attention: Gases	**EmS-No.:** F-D,S-U **Remark:** Attention: Gases Stowage Code: SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters. Segregation Code: SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.	

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 legislation
Authorisations:
Directive 2012/18/EU
Named dangerous substances - ANNEX I: None of the ingredients are included.

Restrictions on use:
Seveso category
E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1
P3a FLAMMABLE AEROSOLS
Quantity threshold (in tons) for use in lower class farms: 100t
Quantity threshold (in tons) for use in upper-tier establishments: 200t
Regulation (EC) No 1907/2006 ANNEX XVII: Restriction conditions: 3, 63, 72
Regulation (EU) No 649/2012 (PIC) Lead, in powder form
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 (3), toluene (3)
Regulation (EC) No 111/2005 laying down rules for the monitoring of trade in drug precursors between the Community and third countries: acetone (3), toluene (3)

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

Named dangerous substances:

• Liquefied flammable gases, Category 1 or 2 (including liquefied petroleum gas) and natural gas

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds:

Volatile organic compound (VOC) content: 670 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

3.2.	Mixtures
8.1.	Control parameters
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
12.1.	Toxicity
12.3.	Bioaccumulative potential
12.5.	Results of PBT and vPvB assessment
13.1.	Waste treatment methods
14.6.	Special precautions for user
14.8.	Additional information
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
16.1.	Indication of changes
16.2.	Abbreviations and acronyms
16.4.	Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]
16.5.	List of relevant hazard statements and/or precautionary statements from sections 2 to 15

* 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
ATE	Acute Toxicity Estimate
AVV	Waste Shipment Ordinance (DE)
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
DNEL	derived no-effect level
EAK	European Waste Catalogue
EC_{50}	Effective Concentration 50%
EG	European Community
EN	European Standard
ES	Exposure scenario
EU	European Union
EWC	European Waste Catalogue
IC_{50}	Inhibition Concentration 50 %
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
KG	body weight

LC_{50}	Lethal (fatal) Concentration 50%
LD_{50}	Lethal (fatal) Dose 50%
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
OECD	Organisation for Economic Cooperation and Development
OEL	Threshold Limit Value
OSHA	Occupational Safety & Health Administration
PBT	persistent and bioaccumulative and toxic
PEL	Permissible Exposure Limit
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation and Authorization of Chemicals
RID	Dangerous goods regulations for transport by rail
SCL	Specific concentration limit
Tox.	Toxicity
TRGS	Technische Regeln für Gefahrstoffe
UFI	Unique Formula Identifier
UN	United Nations
VOC	Volatile organic compounds
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
aerosol dispensers and lighters *(Aerosol 1)*	H222; H229: Extremely flammable aerosol. Pressurised container: May burst if heated.	On basis of test data.
Serious eye damage/eye irritation *(Eye Irrit. 2)*	H319: Causes serious eye irritation.	Calculation method.
STOT-single exposure *(STOT SE 3)*	H336: May cause drowsiness or dizziness.	Calculation method.
Hazardous to the aquatic environment *(Aquatic Acute 1)*	H400: Very toxic to aquatic life.	Calculation method.
Hazardous to the aquatic environment *(Aquatic Chronic 1)*	H410: Very toxic to aquatic life with long lasting effects.	Calculation method.

* 16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

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.
H360D	May damage the unborn child.
H360FD	May damage fertility. May damage the unborn child.
H362	May cause harm to breast-fed children.

Hazard statements	
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.
H412	Harmful to aquatic life with long lasting effects.

Supplemental hazard information	
EUH066	Repeated exposure may cause skin dryness or cracking.

16.6. Training advice
No data available

16.7. Additional information
To the best of our knowledge, the information contained herein is accurate. However, neither the above-mentioned supplier nor its subsidiaries assume any liability with regard to the correctness or completeness of the information provided. A final determination of the suitability of individual materials is the sole responsibility of the user. All materials may involve unknown risks and should be used with caution. While certain risks are described herein, we cannot guarantee that these are the only possible risks.

* Data changed compared with the previous version.