


ZN SPRAY

Creation date	23rd July 2024	Version	4.1
Revision date			

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

- 1.1. Product identifier**
Substance / mixture ZN SPRAY
Number 1 02.0003
UFI RTV3-CX53-F20C-UC12
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Mixture's intended use
Finishing agents. For professional use only.
Main intended use
PC-PNT-1 Aerosol paints and coatings
Mixture uses advised against
The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet**
Supplier
Name or trade name RETECH, s.r.o.
Address Vackova 1541/4, Praha 5 - Stodůlky, 155 00
Czech Republic
Identification number (CRN) 25018205
VAT Reg No CZ25018205
Phone +420327596428
E-mail info@retech.cz
Web address www.retech.com
- Competent person responsible for the safety data sheet**
Name RETECH, s.r.o.
E-mail info@retech.cz
- 1.4. Emergency telephone number**
European emergency number: 112

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**
Classification of the mixture in accordance with Regulation (EC) No 1272/2008
The mixture is classified as dangerous.
- Aerosol 1, H229, H222
Eye Irrit. 2, H319
STOT SE 3, H336
Aquatic Chronic 2, H411
- Most serious adverse physico-chemical effects**
Pressurised container: May burst if heated. Extremely flammable aerosol.
- Most serious adverse effects on human health and the environment**
Causes serious eye irritation. May cause drowsiness or dizziness. Toxic to aquatic life with long lasting effects.
- 2.2. Label elements**
Hazard pictogram
- 
- Signal word**
Danger
- Hazardous substances**
acetone
n-butyl acetate
xylene (contains ethylbenzene - CAS 100-41-4)

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

ZN SPRAY

Creation date	23rd July 2024	Version	4.1
Revision date			

Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

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 spray.
P264	Wash exposed parts of the body thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear eye protection/face protection.
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/doctor if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501	Dispose of contents/container to in accordance with national regulations.

Supplemental information

EUH066	Repeated exposure may cause skin dryness or cracking.
Density	0.733 g/cm ³ at 20 °C
VOC	88,1 %
Dry matter	9,2 % volume
VOC limit value	cat. B (e) : 840 g/l
Max. VOC content in the product in its ready to use condition	645,9 g/l

2.3. Other hazards

Buildup of explosive mixtures possible without sufficient ventilation.
The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

ZN SPRAY

Creation date 23rd July 2024

Revision date

Version

4.1

SECTION 3: Composition/information on ingredients
3.2. Mixtures
Chemical characterization

Mixture of substances and additives specified below.

*ES: 905-588-0 xylene (contains ethylbenzene - CAS 100-41-4) => Contains: 98-82-8 cumene (<0,1 %); 108-88-3 toluene (≤2 %)

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 67-64-1 EC: 200-662-2 Registration number: 01-2119471330-49	acetone	25-<50	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066 Specific concentration limit: ATE Oral = 5800 mg/kg bw ATE Dermal = 20000 mg/kg bw ATE Inhalation (vapor) = 76 mg/l	1
CAS: 74-98-6 EC: 200-827-9 Registration number: 01-2119486944-21	propane	10-<25	Flam. Gas 1A, H220 Press. Gas (compressed gas), H280	
CAS: 106-97-8 EC: 203-448-7 Registration number: 01-2119474691-32	butane (containing < 0,1 % butadiene (203-450-8))	10-<25	Flam. Gas 1A, H220 Press. Gas (compressed gas), H280	
CAS: 75-28-5 EC: 200-857-2 Registration number: 01-2119485395-27	isobutane	2,5-<10	Flam. Gas 1A, H220 Press. Gas (compressed gas), H280	
CAS: 7440-66-6 EC: 231-175-3 Registration number: 01-2119467174-37	zinc powder - zinc dust (stabilised)	2,5-<10	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	
CAS: 1330-20-7 EC: 215-535-7 Registration number: 01-2119488216-32	xylene (mixture of isomers)	2,5-<10	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Acute Tox. 4, H312+H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373	1
CAS: 123-86-4 EC: 204-658-1 Registration number: 01-2119485493-29	n-butyl acetate	2,5-<10	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	1
EC: 905-588-0 Registration number: 01-2119488216-32/- 6136-34*	xylene (contains ethylbenzene - CAS 100-41-4)	1-<2,5	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Acute Tox. 4, H312+H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 3, H412	
CAS: 7779-90-0 EC: 231-944-3 Registration number: 01-2119485044-40	trizinc bis(orthophosphate)	0,25-<1	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	

ZN SPRAY

Creation date 23rd July 2024

Revision date Version 4.1

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 100-41-4 EC: 202-849-4 Registration number: 01-2119489370-35	ethylbenzene	0,1-<1	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Acute Tox. 4, H332 STOT RE 2, H373 Aquatic Chronic 3, H412	1

Notes

1 A substance for which exposure limits are set.

Full text of all classifications and hazard statements is given in the section 16.

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

If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

If inhaled

Terminate the exposure immediately; move the affected person to fresh air. In the event of issues, find medical advice.

If on skin

Generally the product does not irritate the skin.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. In the event of issues, find medical advice.

If swallowed

DO NOT INDUCE VOMITING! Provide medical treatment.

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

May cause drowsiness or dizziness.

If on skin

not available

If in eyes

Causes serious eye irritation.

If swallowed

not available

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

not available

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

Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

not available

5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing.

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

Provide sufficient ventilation. Use personal protective equipment for work. Keep unprotected persons away.

6.2. Environmental precautions

Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system.

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

ZN SPRAY

Creation date	23rd July 2024	Version	4.1
Revision date			

6.3. Methods and material for containment and cleaning up

Provide sufficient ventilation. Dispose of the collected material according to the instructions in the section 13. Do not flush with water or aqueous cleansing agents.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Do not spray on an open flame or other ignition source. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. No smoking. Take precautionary measures against static discharge. Pressurised container: May burst if heated. Keep away from sources of heating, ignition and direct sunlight. Do not pierce or burn, even after use.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

Content	Packaging type	Material of package
400 ml	aerosol can	FE

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

European Union

Commission Directive (EU) 2019/1831

Substance name (component)	Type	Value	Note
n-butyl acetate (CAS: 123-86-4)	OEL 8 hours	241 mg/m ³	
	OEL 8 hours	50 ppm	
	OEL 15 minutes	723 mg/m ³	
	OEL 15 minutes	150 ppm	

European Union

Commission Directive 2000/39/EC

Substance name (component)	Type	Value	Note
acetone (CAS: 67-64-1)	OEL 8 hours	1210 mg/m ³	
	OEL 8 hours	500 ppm	
xylene (mixture of isomers) (CAS: 1330-20-7)	OEL 8 hours	221 mg/m ³	Skin
	OEL 8 hours	50 ppm	
	OEL 15 minutes	442 mg/m ³	
	OEL 15 minutes	100 ppm	
ethylbenzene (CAS: 100-41-4)	OEL 8 hours	442 mg/m ³	Skin
	OEL 8 hours	100 ppm	
	OEL 15 minutes	884 mg/m ³	
	OEL 15 minutes	200 ppm	

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

ZN SPRAY

Creation date

23rd July 2024

Revision date

Version

4.1

DNEL

acetone					
Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Consumers	Oral	62 mg/kg bw/day	Chronic effects systemic		
Consumers	Dermal	62 mg/kg bw/day	Chronic effects systemic		
Workers	Dermal	186 mg/kg bw/day	Chronic effects systemic		
Workers	Inhalation	2420 mg/m ³	Acute effects local		
Consumers	Inhalation	200 mg/m ³	Chronic effects systemic		
Workers	Inhalation	1210 mg/m ³	Chronic effects systemic		

n-butyl acetate					
Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Consumers	Oral	2 mg/kg bw/day	Acute effects systemic		
Consumers	Oral	2 mg/kg bw/day	Chronic effects systemic		
Consumers	Dermal	6 mg/kg bw/day	Acute effects systemic		
Workers	Dermal	11 mg/kg bw/day	Acute effects systemic		
Consumers	Dermal	3.4 mg/kg bw/day	Chronic effects systemic		
Workers	Dermal	7 mg/kg bw/day	Chronic effects systemic		
Consumers	Inhalation	300 mg/m ³	Acute effects systemic		
Workers	Inhalation	600 mg/m ³	Acute effects systemic		
Consumers	Inhalation	300 mg/m ³	Acute effects local		
Workers	Inhalation	600 mg/m ³	Acute effects local		
Consumers	Inhalation	12 mg/m ³	Chronic effects systemic		
Workers	Inhalation	48 mg/m ³	Chronic effects systemic		
Consumers	Inhalation	35.7 mg/m ³	Chronic effects local		
Workers	Inhalation	300 mg/m ³	Chronic effects local		

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

ZN SPRAY

Creation date

23rd July 2024

Revision date

Version

4.1

xylene (contains ethylbenzene - CAS 100-41-4)

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Consumers	Oral	1.6 mg/kg bw/day	Chronic effects systemic		
Consumers	Dermal	108 mg/kg bw/day	Chronic effects systemic		
Workers	Dermal	180 mg/kg bw/day	Chronic effects systemic		
Workers	Inhalation	289 mg/m ³	Acute effects systemic		
Consumers	Inhalation	14.8 mg/m ³	Chronic effects systemic		
Workers	Inhalation	77 mg/m ³	Chronic effects systemic		
Consumers	Inhalation	174 mg/m ³	Acute effects systemic		
Workers	Inhalation	289 mg/m ³	Acute effects local		
Consumers	Inhalation	174 mg/m ³	Chronic effects local		
Workers	Inhalation	221 mg/m ³	Chronic effects local		

xylene (mixture of isomers)

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Consumers	Oral	12.5 mg/kg bw/day	Chronic effects systemic		
Consumers	Dermal	125 mg/kg bw/day	Chronic effects systemic		
Workers	Dermal	212 mg/kg bw/day	Chronic effects systemic		
Consumers	Inhalation	260 mg/m ³	Acute effects systemic		
Workers	Inhalation	442 mg/m ³	Acute effects systemic		
Consumers	Inhalation	260 mg/m ³	Acute effects local		
Workers	Inhalation	442 mg/m ³	Acute effects local		
Consumers	Inhalation	65.3 mg/m ³	Chronic effects systemic		
Workers	Inhalation	221 mg/m ³	Chronic effects systemic		
Consumers	Inhalation	65.3 mg/m ³	Chronic effects local		
Workers	Inhalation	221 mg/m ³	Chronic effects local		

zinc powder - zinc dust (stabilised)

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Oral	50 mg/kg bw/day	Chronic effects systemic		
Consumers	Dermal	5000 mg/kg bw/day	Chronic effects systemic		
Workers	Dermal	5000 mg/kg bw/day	Chronic effects systemic		
Consumers	Inhalation	2.5 mg/m ³	Chronic effects systemic		
Workers	Inhalation	5 mg/m ³	Chronic effects systemic		

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

ZN SPRAY

Creation date

23rd July 2024

Revision date

Version

4.1

PNEC

acetone			
Route of exposure	Value	Value determination	Source
Marine water	1.06 mg/l		
Freshwater sediment	30.4 mg/kg of dry substance of sediment		
Soil (agricultural)	29.5 mg/kg		
Sea sediments	3.04 mg/kg of dry substance of sediment		

n-butyl acetate			
Route of exposure	Value	Value determination	Source
Freshwater environment	0.18 mg/l		
Marine water	0.015 mg/l		
Freshwater sediment	0.981 mg/kg of dry substance of sediment		
Water (intermittent release)	0.36 mg/l		
Soil (agricultural)	0.0903 mg/kg of dry substance of soil		
Microorganisms in sewage treatment	35.6 mg/l		
Sea sediments	0.0981 mg/kg of dry substance of sediment		

xylene (contains ethylbenzene - CAS 100-41-4)			
Route of exposure	Value	Value determination	Source
Freshwater environment	0.327 mg/l		
Marine water	0.327 mg/l		
Freshwater sediment	12.46 mg/kg of dry substance of sediment		
Soil (agricultural)	2.31 mg/kg of dry substance of soil		
Microorganisms in sewage treatment	6.58 mg/l		
Sea sediments	12.46 mg/kg of dry substance of sediment		

zinc powder - zinc dust (stabilised)			
Route of exposure	Value	Value determination	Source
Freshwater environment	20.6 mg/l		
Marine water	6.1 mg/l		
Freshwater sediment	118 mg/kg of dry substance of sediment		
Soil (agricultural)	56.6 mg/kg of dry substance of soil		

ZN SPRAY

Creation date 23rd July 2024
Revision date

Version 4.1

zinc powder - zinc dust (stabilised)			
Route of exposure	Value	Value determination	Source
Microorganisms in sewage treatment	52 mg/l		
Sea sediments	56.5 mg/kg of dry substance of sediment		

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. Do not store together with food, drink and animal feed. Remove contaminated clothes. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest. Do not inhale mist/vapours/spray. Prevent contact with skin and eyes.

Eye/face protection

Tightly sealed goggles.

Skin protection

Hand protection: Protective gloves resistant to the product. Material of gloves: Nitrile rubber, NBR. Recommended thickness of the material: ≥ 0.5 mm. Penetration time of glove material: > 480 min. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer.

Other protection: protective workwear and footwear.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Filter AX/P2.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	transparent
Odour	characteristic
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	-44.5 °C
acetone (CAS: 67-64-1)	55.8-56.6 °C
Flammability	Extremely flammable aerosol.
Lower and upper explosion limit	
bottom	1.1 %
upper	13.0 %
Flash point	-97 °C
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	non-polar/aprotic
Kinematic viscosity	data not available
Solubility in water	almost insoluble
Solubility in fats	data not available
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	8300 hPa at 20 °C
Density and/or relative density	
Density	0.733 g/cm ³ at 20 °C
Relative vapour density	data not available
Particle characteristics	data not available
Form	aerosol dispenser: spray aerosol

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

ZN SPRAY

Creation date	23rd July 2024	Version	4.1
Revision date			

data not available	
9.2. Other information	
Evaporation rate	data not available
Ignition temperature	365 °C
Explosive properties	The product does not have explosive properties but can be explosive when blended with air.
Content of organic solvents (VOC)	88.1 %
Solid content (dry matter)	9.2 % volume
VOC limit value	cat. B (e) : 840 g/l
Max. VOC content in the product in its ready to use condition	645.9 g/l
Product is not selfigniting.	

SECTION 10: Stability and reactivity

10.1. Reactivity
not available

10.2. Chemical stability
The product is stable under normal conditions.

10.3. Possibility of hazardous reactions
Unknown.

10.4. Conditions to avoid
not available

10.5. Incompatible materials
not available

10.6. Hazardous decomposition products
Unknown.

SECTION 11: Toxicological information

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

No toxicological data is available for the mixture.

Acute toxicity

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

ZN SPRAY						
Route of exposure	Parameter	Value	Exposure time	Species	Sex	Value determination
Dermal	ATE	>15180 mg/kg		Rat		Estimated value
Inhalation	ATE	>152 mg/l		Rat		Estimated value

acetone						
Route of exposure	Parameter	Value	Exposure time	Species	Sex	Value determination
Oral	LD ₅₀	5800 mg/kg		Rat		
Dermal	LD ₅₀	7800 mg/kg		Rabbit		
Inhalation	LC ₅₀	>20 mg/l	4 hours	Rat		
Oral	ATE	5800 mg/kg bw				
Dermal	ATE	20000 mg/kg bw				
Inhalation (vapor)	ATE	76 mg/l				

n-butyl acetate						
Route of exposure	Parameter	Value	Exposure time	Species	Sex	Value determination
Oral	LD ₅₀	10760 mg/kg		Rat		
Dermal	LD ₅₀	>14112 mg/kg		Rabbit		

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

ZN SPRAY

Creation date

23rd July 2024

Revision date

Version

4.1

xylene (contains ethylbenzene - CAS 100-41-4)

Route of exposure	Parameter	Value	Exposure time	Species	Sex	Value determination
Oral	LD ₅₀	3523 mg/kg		Rat		
Dermal	LD ₅₀	12126 mg/kg		Rabbit		
Inhalation	LC ₅₀	29000 mg/l	4 hours	Rat		

xylene (mixture of isomers)

Route of exposure	Parameter	Value	Exposure time	Species	Sex	Value determination
Oral	LD ₅₀	4300 mg/kg		Rat		
Dermal	LD ₅₀	12126 mg/kg		Rabbit		
Inhalation	LC ₅₀	6350 mg/l	4 hours	Rat		

zinc powder - zinc dust (stabilised)

Route of exposure	Parameter	Value	Exposure time	Species	Sex	Value determination
Oral	LD ₅₀	>2000 mg/kg		Rat		
Inhalation	LC ₅₀	>5.4 mg/kg	4 hours	Rat		

Skin corrosion/irritation

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Serious eye damage/irritation

Causes serious eye irritation. Data for the components of the mixture are not available.

Respiratory or skin sensitisation

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Germ cell mutagenicity

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Carcinogenicity

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Reproductive toxicity

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Toxicity for specific target organ - single exposure

May cause drowsiness or dizziness. Data for the components of the mixture are not available.

Toxicity for specific target organ - repeated exposure

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Aspiration hazard

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

ZN SPRAY

Creation date 23rd July 2024

Revision date

Version

4.1

11.2. Information on other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12: Ecological information

12.1. Toxicity

Toxic to aquatic life with long lasting effects.

Acute toxicity

acetone				
Parameter	Value	Exposure time	Species	Environment
EC ₅₀	8800 mg/l		Daphnia (Daphnia magna)	
EC ₅₀	8300 mg/l		Fish	

n-butyl acetate				
Parameter	Value	Exposure time	Species	Environment
LC ₅₀	18 mg/l	96 hours	Fish	
EC ₅₀	44 mg/l	48 hours	Daphnia (Daphnia magna)	

xylene (contains ethylbenzene - CAS 100-41-4)				
Parameter	Value	Exposure time	Species	Environment
EC ₅₀	3.2-9.5 mg/l	48 hours	Daphnia (Daphnia magna)	
LC ₅₀	8.9-16.4 mg/l	96 hours	Fish (Pimephales promelas)	

xylene (mixture of isomers)				
Parameter	Value	Exposure time	Species	Environment
LC ₅₀	8.9-16.4 mg/l	96 hours	Fish (Pimephales promelas)	
EC ₅₀	3.2-9.5 mg/l	48 hours	Daphnia (Daphnia magna)	

zinc powder - zinc dust (stabilised)				
Parameter	Value	Exposure time	Species	Environment
EC ₅₀	354 µg/l	48 hours	Daphnia (Daphnia magna)	
EC ₁₀	59.2 µg/l	21 days	Daphnia (Daphnia magna)	
EC ₁₀	27.3 µg/l	72 hours	Algae	
EC ₅₀	0.17 mg/l	72 hours	Algae (Selenastrum capricornutum)	
LC ₅₀	0.41 mg/l	96 hours	Fish (Oncorhynchus mykiss)	
EC ₅₀	1 mg/l	48 hours	Daphnia (Daphnia magna)	
EC ₅₀	0.527 mg/l	96 hours	Algae	
LC ₅₀	238-269 µg/l	96 hours	Fish (Pimephales promelas)	

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

ZN SPRAY

Creation date 23rd July 2024

Revision date

Version

4.1

Chronic toxicity

xylene (contains ethylbenzene - CAS 100-41-4)				
Parameter	Value	Exposure time	Species	Environment
NOEC	1.3 mg/l		Fish	
NOEC	0.96 mg/l	7 days	Daphnia (Daphnia magna)	
NOEC	0.44 mg/l	72 hours	Algae	
NOEC	16 mg/l	28 days	Bacteria	

zinc powder - zinc dust (stabilised)				
Parameter	Value	Exposure time	Species	Environment
NOEC	178 µg/l	21 days	Crustaceans (Palaemon elegans)	
NOEC	9 mg/l	72 hours	Algae and other aquatic plants (Ceratophyllum demersum)	
NOEC	0.017 mg/l	72 hours	Algae (Pseudokirchneriella subcapitata)	
NOEC	72.9 µg/l	72 hours	Algae (Pseudokirchneriella subcapitata)	
NOEC	8.3 µg/l	4 days	Fish (Cyprinus carpio)	

12.2. Persistence and degradability

The product is not easily biodegradable.

12.3. Bioaccumulative potential

Not available.

12.4. Mobility in soil

Not available.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

Water hazard class 2 (German Regulation; Self-assessment): hazardous for water. Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification.

HP3 'Flammable'.

HP 4 'Irritant — skin irritation and eye damage'.

HP 5 'Specific Target Organ Toxicity (STOT)/Aspiration Toxicity'.

HP 14 'Ecotoxic'.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

ZN SPRAY

Creation date	23rd July 2024	Version	4.1
Revision date			

Waste type code

16 03 05* organic wastes containing hazardous substances

Packaging waste type code

15 01 11* metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers

(*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

SECTION 14: Transport information

14.1. UN number or ID number

UN 1950

14.2. UN proper shipping name

AEROSOLS

14.3. Transport hazard class(es)

2 Gases

14.4. Packing group

not relevant

14.5. Environmental hazards

Yes

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

Additional information

Stowage Code:

SW1 Protected from sources of heat.

SW2 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.

Hazard identification No.

UN number

Classification code

Safety signs



5F

2.1+dangerous for the environment



Road transport - ADR

Limited quantities

1L

Excepted quantities

E0

Tunnel restriction code

(D)

Railway transport - RID

Marine transport - IMDG

EmS (emergency plan)

F-D, S-U

Marine pollutant

Yes

ZN SPRAY

Creation date 23rd July 2024
Revision date

Version 4.1

SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Product contains reportable explosives precursors: Reporting of suspicious transactions, disappearances and thefts according to Regulation (EU) 2019/1148, Article 9. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

More information

Directive 2012/18/EU of the European parliament and of the Council - ANNEX I - Hazard categories: P3a FLAMMABLE AEROSOLS. E2 Hazardous to the Aquatic Environment in Category Chronic 2.

Qualifying quantity (tonnes) of dangerous substances for the application - of lower-tier requirements: 150 (net).

Qualifying quantity (tonnes) of dangerous substances for the application of - upper-tier requirements: 500 (net).

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

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.
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.
H412	Harmful to aquatic life with long lasting effects.
H312+H332	Harmful in contact with skin or if inhaled.

Guidelines for safe handling used in the safety data sheet

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 spray.
P264	Wash exposed parts of the body thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear eye protection/face protection.
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/doctor if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

ZN SPRAY

Creation date	23rd July 2024	Version	4.1
Revision date			

P501	Dispose of contents/container to in accordance with national regulations.
A list of additional standard phrases used in the safety data sheet	
EUH066	Repeated exposure may cause skin dryness or cracking.
Other important information about human health protection	
The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.	
Key to abbreviations and acronyms used in the safety data sheet	
ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC	Identification code for each substance listed in EINECS
EC ₁₀	Concentration of a substance when it is affected 10% of the population
EC ₅₀	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC ₅₀	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD ₅₀	Lethal dose of a substance in which it can be expected death of 50% of the population
log K _{ow}	Octanol-water partition coefficient
NOEC	No observed effect concentration
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative
Acute Tox.	Acute toxicity
Aerosol	Aerosol
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Asp. Tox.	Aspiration hazard
Eye Irrit.	Eye irritation
Flam. Gas	Flammable gas
Flam. Liq.	Flammable liquid
Press. Gas	Gases under pressure

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

ZN SPRAY

Creation date	23rd July 2024	Version	4.1
Revision date			

Skin Irrit.

Skin irritation

STOT RE

Specific target organ toxicity - repeated exposure

STOT SE

Specific target organ toxicity - single exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.
REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

The version 4.1 replaces the SDS version from 28 July 2022. Changes were made in sections 1, 2, 3, 8, 11, 12, 13, 14, 15 and 16.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.