

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

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

1.1 Product identifier

Trade name	Zinc spray
Registration number (REACH)	not relevant (mixture)
Unique formula identifier (UFI)	E330-C0D9-J002-NV99
Article number	TSP 410

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

Relevant identified uses	Industrial use Professional use
Uses advised against	Do not use for private purposes (household)

1.3 Details of the supplier of the safety data sheet

Chemicar Europe NV
Baarbeek 2
2070 Zwijndrecht
Belgium

Telephone: +32 3 234 87 80
e-mail: msds@emm.com
Website: www.finixa.com

e-mail (competent person)

msds@emm.com

1.4 Emergency telephone number

Emergency information service	+31 38 4676600 This number is only available during the following office hours: Mon-Fri 09:00 - 17:00
-------------------------------	--

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Section	Hazard class	Category	Hazard class and category	Hazard statement
2.3	aerosols	1	Aerosol 1	H222,H229
3.3	serious eye damage/eye irritation	2	Eye Irrit. 2	H319
3.8R	specific target organ toxicity - single exposure (respiratory tract irritation)	3	STOT SE 3	H335
3.8D	specific target organ toxicity - single exposure (narcotic effects, drowsiness)	3	STOT SE 3	H336
4.1A	hazardous to the aquatic environment - acute hazard	1	Aquatic Acute 1	H400
4.1C	hazardous to the aquatic environment - chronic hazard	1	Aquatic Chronic 1	H410

For full text of H-phrases: see SECTION 16

Code	Supplemental hazard information
EUH208	contains Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1- amine, (Z)-. May produce an allergic reaction

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

2.2 Label elements

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

- signal word Danger

- pictograms

GHS02, GHS07,
GHS09



- hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H410	Very 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.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
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 CENTRE/doctor if you feel unwell.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

- supplemental hazard information

EUH208 Contains Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1- amine, (Z)-. May produce an allergic reaction.

- hazardous ingredients for labelling

Contains: Hydrocarbons, C9, aromatics; Acetone; reaction mass of ethylbenzene and xylene.

Additional labelling according to Directive 75/324/EEC relating to aerosol dispensers

Extremely flammable. Pressurized container: may burst if heated. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Do not spray on an open flame or other ignition source.

2.3 Other hazards

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture).

3.2 Mixtures

The product does not contain (other) ingredients which are classified according to present knowledge of the supplier and contribute to the classification of the product and hence require reporting in this section.

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
Zinc	CAS No 7440-66-6 EC No 231-175-3 Index No 030-001-01-9 REACH Reg. No 01-2119467174-37-xxxx	25 – < 50	Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410		GHS-HC
dimethyl ether	CAS No 115-10-6 EC No 204-065-8 Index No 603-019-00-8 REACH Reg. No 01-2119472128-37-xxxx	25 – < 50	Flam. Gas 1A / H220 Press. Gas C / H280	 	GHS-HC IOELV U(b)
Acetone	CAS No 67-64-1 EC No 200-662-2 Index No 606-001-00-8 REACH Reg. No 01-2119471330-49-xxxx	5 – < 10	Flam. Liq. 2 / H225 Eye Irrit. 2 / H319 STOT SE 3 / H336 EUH066	 	GHS-HC IOELV
Hydrocarbons, C9, aromatics	CAS No 128601-23-0 EC No 918-668-5 REACH Reg. No 01-2119455851-35-xxxx	5 – < 10	Flam. Liq. 3 / H226 STOT SE 3 / H335 STOT SE 3 / H336 Asp. Tox. 1 / H304 Aquatic Chronic 2 / H411 EUH066	   	
reaction mass of ethylbenzene and xylene	EC No 905-588-0 REACH Reg. No 01-2119488216-32-xxxx	5 – < 10	Flam. Liq. 3 / H226 Acute Tox. 4 / H312 Acute Tox. 4 / H332 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 STOT SE 3 / H335 STOT RE 2 / H373 Asp. Tox. 1 / H304 Aquatic Chronic 3 / H412	  	
Zinc oxide	CAS No 1314-13-2 EC No 215-222-5 Index No 030-013-00-7 REACH Reg. No 01-2119463881-32-xxxx	≥ 0,25 – < 2,5	Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410		GHS-HC

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1-amine, (Z)-	CAS No 147900-93-4 EC No 604-612-4	0,1 – < 1	Acute Tox. 4 / H302 Skin Sens. 1 / H317 STOT RE 2 / H373 Aquatic Chronic 2 / H411		

Notes

GHS-HC: Harmonised classification (the classification of the substance corresponds to the entry in the list according to 1272/2008/EC, Annex VI)

IOELV: Substance with a community indicative occupational exposure limit value

U(b): The allocation to the group 'compressed gas' is based on the physical state in which the gas is packaged

Name of sub-stance	Identifier	Specific Conc. Limits	M-Factors	ATE	Exposure route
reaction mass of ethylbenzene and xylene		-	-	1.100 mg/kg 11 mg/l/4h	dermal inhalation: vapour
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1-amine, (Z)-	CAS No 147900-93-4	-	-	>1.570 mg/kg	oral

Remarks

All the percentages given are percentages by weight unless stated otherwise. For full text of H-phrases: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. In case of unconsciousness place person in the recovery position. Never give anything by mouth. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation

Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician.

Following skin contact

Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Following eye contact

Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor.

Following ingestion

Rinse mouth with water (only if the person is conscious). Call a POISON CENTER or doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Narcotic effects.

4.3 Indication of any immediate medical attention and special treatment needed

For specialist advice physicians should contact the poison centre.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray; Dry extinguishing powder;

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

Co-ordinate firefighting measures to the fire surroundings.

Unsuitable extinguishing media

Water jet.

5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture.

Hazardous combustion products

During fire hazardous fumes/smoke could be produced. Carbon monoxide (CO). Carbon dioxide (CO₂).

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

Self-contained breathing apparatus (SCBA). Standard protective clothing for firefighters.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety. Ventilate affected area.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases. Use personal protective equipment as required.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Take precautionary measures against static discharge. Use only in well-ventilated areas. Ground/bond container and receiving equipment. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- flammability hazards

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Protect from sunlight.

- incompatible substances or mixtures

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

Keep away from alkalis, oxidising substances, acids.

Control of effects

Protect against external exposure, such as

High temperatures. UV-radiation/sunlight.

Consideration of other advice

Store in a well-ventilated place. Keep container tightly closed.

- packaging compatibilities

Keep only in original container.

7.3 Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Generic EU SDS - No country specific limit values mentioned.

Occupational exposure limit values (Workplace Exposure Limits)									
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Notation	Source
EU	dimethyl ether	115-10-6	IOELV	1.000	1.920				2000/39/EC
EU	acetone	67-64-1	IOELV	500	1.210				2000/39/EC

Notation

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Relevant DNELs/DMELs/PNECs and other threshold levels

Relevant DNELs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Zinc	7440-66-6	DNEL	5 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Zinc	7440-66-6	DNEL	83 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Zinc	7440-66-6	DNEL	2,5 mg/m³	human, inhalatory	consumer (private households)	chronic - systemic effects
Zinc	7440-66-6	DNEL	83 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
Zinc	7440-66-6	DNEL	0,83 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
Acetone	67-64-1	DNEL	1.210 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Acetone	67-64-1	DNEL	2.420 mg/m³	human, inhalatory	worker (industry)	acute - local effects
Acetone	67-64-1	DNEL	186 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Acetone	67-64-1	DNEL	200 mg/m³	human, inhalatory	consumer (private)	chronic - systemic

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

Relevant DNELs of components of the mixture						
Name of sub- stance	CAS No	End- point	Threshold level	Protection goal, route of expos- ure	Used in	Exposure time
					households)	effects
Acetone	67-64-1	DNEL	62 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
Acetone	67-64-1	DNEL	62 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
Hydrocarbons, C9, aromatics	128601-23-0	DNEL	151 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
Hydrocarbons, C9, aromatics	128601-23-0	DNEL	12,5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Hydrocarbons, C9, aromatics	128601-23-0	DNEL	32 mg/m ³	human, inhalatory	consumer (private households)	chronic - systemic effects
Hydrocarbons, C9, aromatics	128601-23-0	DNEL	7,5 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
Hydrocarbons, C9, aromatics	128601-23-0	DNEL	7,5 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
reaction mass of ethylbenzene and xy- lene		DNEL	77 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
reaction mass of ethylbenzene and xy- lene		DNEL	293 mg/m ³	human, inhalatory	worker (industry)	acute - local effects
reaction mass of ethylbenzene and xy- lene		DNEL	180 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
reaction mass of ethylbenzene and xy- lene		DNEL	15 mg/m ³	human, inhalatory	consumer (private households)	chronic - systemic effects
reaction mass of ethylbenzene and xy- lene		DNEL	1,6 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
reaction mass of ethylbenzene and xy- lene		DNEL	442 mg/m ³	human, inhalatory	worker (industry)	acute - systemic ef- fects
reaction mass of ethylbenzene and xy- lene		DNEL	221 mg/m ³	human, inhalatory	worker (industry)	chronic - local ef- fects
reaction mass of ethylbenzene and xy- lene		DNEL	260 mg/m ³	human, inhalatory	consumer (private households)	acute - systemic ef- fects
reaction mass of ethylbenzene and xy- lene		DNEL	65,3 mg/m ³	human, inhalatory	consumer (private households)	chronic - local ef- fects
reaction mass of ethylbenzene and xy- lene		DNEL	260 mg/m ³	human, inhalatory	consumer (private households)	acute - local effects
reaction mass of ethylbenzene and xy- lene		DNEL	125 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
Fatty acids, C-18, un- satd. trimers, compd. with 9-octadecen-1- amine, (Z)-	147900-93-4	DNEL	0,024 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

Relevant DNELs of components of the mixture						
Name of sub-stance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1-amine, (Z)-	147900-93-4	DNEL	0,012 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1-amine, (Z)-	147900-93-4	DNEL	0,012 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects

Relevant PNECs of components						
Name of sub-stance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
dimethyl ether	115-10-6	PNEC	0,155 mg/l	aquatic organisms	freshwater	short-term (single instance)
dimethyl ether	115-10-6	PNEC	0,016 mg/l	aquatic organisms	marine water	short-term (single instance)
dimethyl ether	115-10-6	PNEC	160 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
dimethyl ether	115-10-6	PNEC	0,681 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
dimethyl ether	115-10-6	PNEC	0,069 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
dimethyl ether	115-10-6	PNEC	0,045 mg/kg	terrestrial organisms	soil	short-term (single instance)
Zinc	7440-66-6	PNEC	19,7 µg/l	aquatic organisms	freshwater	short-term (single instance)
Zinc	7440-66-6	PNEC	7,7 µg/l	aquatic organisms	marine water	short-term (single instance)
Zinc	7440-66-6	PNEC	100 µg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Zinc	7440-66-6	PNEC	146,9 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Zinc	7440-66-6	PNEC	162,2 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Zinc	7440-66-6	PNEC	83,1 mg/kg	terrestrial organisms	soil	short-term (single instance)
Acetone	67-64-1	PNEC	21 mg/l	aquatic organisms	water	intermittent release
Acetone	67-64-1	PNEC	10,6 mg/l	aquatic organisms	freshwater	short-term (single instance)
Acetone	67-64-1	PNEC	1,06 mg/l	aquatic organisms	marine water	short-term (single instance)
Acetone	67-64-1	PNEC	100 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Acetone	67-64-1	PNEC	30,4 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Acetone	67-64-1	PNEC	3,04 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Acetone	67-64-1	PNEC	29,5 mg/kg	terrestrial organ-	soil	short-term (single

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

Relevant PNECs of components						
Name of sub-stance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
				isms		instance)
reaction mass of ethylbenzene and xy-lene		PNEC	0,1 mg/l	aquatic organisms	freshwater	short-term (single instance)
reaction mass of ethylbenzene and xy-lene		PNEC	0,01 mg/l	aquatic organisms	marine water	short-term (single instance)
reaction mass of ethylbenzene and xy-lene		PNEC	9,6 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
reaction mass of ethylbenzene and xy-lene		PNEC	13,7 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
reaction mass of ethylbenzene and xy-lene		PNEC	1,37 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
reaction mass of ethylbenzene and xy-lene		PNEC	2,68 mg/kg	terrestrial organ-isms	soil	short-term (single instance)
Zinc oxide	1314-13-2	PNEC	17,9 µg/l	aquatic organisms	freshwater	short-term (single instance)
Zinc oxide	1314-13-2	PNEC	9 µg/l	aquatic organisms	marine water	short-term (single instance)
Zinc oxide	1314-13-2	PNEC	124,5 µg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Zinc oxide	1314-13-2	PNEC	182,8 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Zinc oxide	1314-13-2	PNEC	201,9 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Zinc oxide	1314-13-2	PNEC	103,4 mg/kg	terrestrial organ-isms	soil	short-term (single instance)
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1-amine, (Z)-	147900-93-4	PNEC	6 µg/l	aquatic organisms	freshwater	short-term (single instance)
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1-amine, (Z)-	147900-93-4	PNEC	0,6 µg/l	aquatic organisms	marine water	short-term (single instance)
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1-amine, (Z)-	147900-93-4	PNEC	2,46 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1-amine, (Z)-	147900-93-4	PNEC	0,25 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1-amine, (Z)-	147900-93-4	PNEC	0,28 mg/kg	terrestrial organ-isms	soil	short-term (single instance)

8.2 Exposure controls

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

Appropriate engineering controls

General ventilation. Provide eyewash stations and safety showers at the workplace.

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection (EN ISO 16321).

Skin protection



Chemical protective clothing. Protective clothing (EN ISO 13688).

Hand protection



Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- type of material

Butyl rubber

- material thickness

Use gloves with a minimum material thickness: $\geq 0,40$ mm.

- breakthrough time of the glove material

Use gloves with a minimum breakthrough time of the glove material: >480 minutes (permeation: level 6).

- other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

During spraying wear suitable respiratory equipment. In case of inadequate ventilation wear respiratory protection. Full face mask/half mask/quarter mask (EN 136/140). Type: ABEK-P2 (combined filters against gases, vapours and particles, colour code: Brown/Grey/Yellow/Green/White).

Environmental exposure controls

Take appropriate precautions to avoid uncontrolled release into the environment. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid, solid, gaseous (spray aerosol)
Colour	grey
Odour	like solvents
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	-24,8 °C calculated value, referring to a component of the mixture
Flammability	flammable aerosol in accordance with GHS criteria
Lower and upper explosion limit	LEL: 0,9 vol% / UEL: 26,2 vol% calculated value, referring to a component of the mixture
Flash point	not applicable
Auto-ignition temperature	226 °C (auto-ignition temperature (liquids and gases)) calculated value, referring to a component of the mixture

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

Decomposition temperature	no data available
pH (value)	not determined
Kinematic viscosity	not relevant
Solubility	not determined

Partition coefficient n-octanol/water (log value)	this information is not available
---	-----------------------------------

Vapour pressure	4.000 hPa at 20 °C
-----------------	--------------------

Density and/or relative density

Density	1,1 g/cm³ at 20 °C
Relative vapour density	information on this property is not available

Particle characteristics	not relevant (aerosol)
--------------------------	------------------------

9.2 Other information

Information with regard to physical hazard classes	there is no additional information
Other safety characteristics	there is no additional information

SECTION 10: Stability and reactivity

10.1 Reactivity

The mixture contains reactive substance(s). Risk of ignition.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Do not spray on an open flame or other ignition source. Keep away from heat.

Hints to prevent fire or explosion

Protect from sunlight.

10.5 Incompatible materials

Oxidisers.

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to GHS

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity estimate (ATE) of components			
Name of substance	CAS No	Exposure route	ATE
reaction mass of ethylbenzene and xylene		dermal	1.100 mg/kg
reaction mass of ethylbenzene and xylene		inhalation: vapour	11 mg/l/4h
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1- amine, (Z)-	147900-93-4	oral	>1.570 mg/kg

Acute toxicity of components					
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
dimethyl ether	115-10-6	inhalation: gas	LC50	164.000 ppmV/4h	rat
Zinc	7440-66-6	oral	LD50	>2.000 mg/kg	rat
Zinc	7440-66-6	inhalation: dust/mist	LC50	>5.410 mg/m ³ /4h	rat
Acetone	67-64-1	oral	LD50	5.800 mg/kg	rat
Hydrocarbons, C9, aromatics	128601-23-0	oral	LD50	7.093 mg/kg	rat
Hydrocarbons, C9, aromatics	128601-23-0	dermal	LD50	>2.000 mg/kg	rabbit
reaction mass of ethylbenzene and xylene		inhalation: vapour	LC50	27.124 mg/m ³ /4h	rat
reaction mass of ethylbenzene and xylene		oral	LD50	3.523 mg/kg	rat
reaction mass of ethylbenzene and xylene		dermal	LD50	12.126 mg/kg	rabbit
Zinc oxide	1314-13-2	oral	LD50	>5.000 mg/kg	rat
Zinc oxide	1314-13-2	dermal	LD50	>2.000 mg/kg	rat
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1- amine, (Z)-	147900-93-4	oral	LD50	>1.570 mg/kg	rat

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Contains Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1- amine, (Z)-. May produce an allergic reaction.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

May cause respiratory irritation. May cause drowsiness or dizziness.

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

Other information

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
dimethyl ether	115-10-6	LC50	$>4,1 \text{ g/l}$	guppy (Poecilia reticulata)	96 h
dimethyl ether	115-10-6	EC50	$>4,4 \text{ g/l}$	daphnia magna	48 h
dimethyl ether	115-10-6	NOEC	$\geq 4,1 \text{ g/l}$	guppy (Poecilia reticulata)	96 h
Zinc	7440-66-6	ErC50	$2.700 \text{ } \mu\text{g/l}$	algae	48 h
Zinc	7440-66-6	LC50	$315 \text{ } \mu\text{g/l}$	fish	96 h
Zinc	7440-66-6	EC50	$548 \text{ } \mu\text{g/l}$	daphnia magna	48 h
Zinc	7440-66-6	NOEC	$128 \text{ } \mu\text{g/l}$	aquatic invertebrates	48 h
Zinc	7440-66-6	growth rate (Er-Cx) 10%	$646 \text{ } \mu\text{g/l}$	algae	48 h
Zinc	7440-66-6	growth (EbCx) 10%	$106 \text{ } \mu\text{g/l}$	aquatic invertebrates	48 h
Acetone	67-64-1	LC50	8.120 mg/l	fathead minnow (Pimephales promelas)	96 h
Hydrocarbons, C9, aromatics	128601-23-0	LL50	$9,2 \text{ mg/l}$	rainbow trout (Oncorhynchus mykiss)	96 h
Hydrocarbons, C9, aromatics	128601-23-0	EL50	$3,2 \text{ mg/l}$	daphnia magna	48 h
Hydrocarbons, C9, aromatics	128601-23-0	NOELR	1 mg/l	algae	72 h
reaction mass of ethylbenzene and xylene		ErC50	$4,7 \text{ mg/l}$	algae	72 h
reaction mass of ethylbenzene and xylene		LL50	$5,089 \text{ mg/l}$	rainbow trout (Oncorhynchus mykiss)	72 h
reaction mass of ethylbenzene and xylene		LC50	$7,6 \text{ mg/l}$	rainbow trout (Oncorhynchus mykiss)	96 h
reaction mass of ethylbenzene and xylene		EL50	$5,267 \text{ mg/l}$	algae	72 h
reaction mass of ethylbenzene and xylene		EC50	$4,7 \text{ mg/l}$	algae	72 h
reaction mass of ethylbenzene and		NOELR	$1,009 \text{ mg/l}$	algae	72 h

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

Aquatic toxicity (acute) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
xylene					
Zinc oxide	1314-13-2	ErC50	3,35 mg/l	algae	72 h
Zinc oxide	1314-13-2	LC50	1,793 mg/l	zebra fish (Danio rerio)	96 h
Zinc oxide	1314-13-2	EC50	7,5 mg/l	daphnia magna	48 h
Zinc oxide	1314-13-2	NOEC	128 µg/l	aquatic invertebrates	48 h
Zinc oxide	1314-13-2	LOEC	10 mg/l	unknown	96 h
Zinc oxide	1314-13-2	growth rate (Er-Cx) 10%	0,45 mg/l	algae	72 h
Zinc oxide	1314-13-2	growth (EbCx) 10%	5,2 mg/l	daphnia magna	48 h
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1-amine, (Z)-	147900-93-4	LL50	>100 mg/l	fish	96 h
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1-amine, (Z)-	147900-93-4	EL50	>100 mg/l	aquatic invertebrates	48 h
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1-amine, (Z)-	147900-93-4	NOELR	≥100 mg/l	fish	96 h

Aquatic toxicity (chronic) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Zinc	7440-66-6	EbC50	6.813 µg/l	aquatic invertebrates	21 d
Zinc	7440-66-6	ErC50	410 µg/l	algae	10 d
Zinc	7440-66-6	LC50	330 µg/l	fathead minnow (Pimephales promelas)	95 h
Zinc	7440-66-6	EC50	817 µg/l	fish	75 h
Zinc	7440-66-6	NOEC	36 µg/l	rainbow trout (Onco-rhynchus mykiss)	25 d
Zinc	7440-66-6	LOEC	51 µg/l	fish	30 d
Zinc	7440-66-6	growth (EbCx) 10%	259 µg/l	rainbow trout (Onco-rhynchus mykiss)	30 d
Acetone	67-64-1	EC50	61,15 g/l	microorganisms	30 min
Acetone	67-64-1	NOEC	2.212 mg/l	daphnia magna	28 d
Acetone	67-64-1	LOEC	2.212 mg/l	daphnia magna	28 d
Acetone	67-64-1	growth (EbCx) 12%	1.000 mg/l	microorganisms	30 min
Hydrocarbons, C9, aromatics	128601-23-0	EC50	>99 mg/l	microorganisms	10 min
Hydrocarbons, C9, aromatics	128601-23-0	NOEC	>99 mg/l	microorganisms	10 min
reaction mass of ethylbenzene and xylene		ErC50	4,36 mg/l	algae	73 h

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

Aquatic toxicity (chronic) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
reaction mass of ethylbenzene and xylene		EL50	2,9 mg/l	daphnia magna	21 d
reaction mass of ethylbenzene and xylene		EC50	2,2 mg/l	algae	73 h
reaction mass of ethylbenzene and xylene		NOELR	0,975 mg/l	rainbow trout (Onco-rhynchus mykiss)	21 d
reaction mass of ethylbenzene and xylene		NOEC	0,714 mg/l	zebra fish (Danio rerio)	35 d
reaction mass of ethylbenzene and xylene		LOEC	1,29 mg/l	zebra fish (Danio rerio)	35 d
reaction mass of ethylbenzene and xylene		growth (EbCx) 10%	1,91 mg/l	daphnia magna	21 d
Zinc oxide	1314-13-2	EbC50	6.813 µg/l	aquatic invertebrates	21 d
Zinc oxide	1314-13-2	ErC50	0,65 mg/l	algae	4 d
Zinc oxide	1314-13-2	EC50	2,065 mg/l	zebra fish (Danio rerio)	84 h
Zinc oxide	1314-13-2	LC50	23,06 mg/l	zebra fish (Danio rerio)	84 h
Zinc oxide	1314-13-2	NOEC	36 µg/l	rainbow trout (Onco-rhynchus mykiss)	25 d
Zinc oxide	1314-13-2	LOEC	51 µg/l	fish	30 d
Zinc oxide	1314-13-2	growth (EbCx) 10%	88 µg/l	rainbow trout (Onco-rhynchus mykiss)	69 d
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1-amine, (Z)-	147900-93-4	EL50	>100 mg/l	aquatic invertebrates	21 d
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1-amine, (Z)-	147900-93-4	LL50	>100 mg/l	aquatic invertebrates	21 d
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1-amine, (Z)-	147900-93-4	EC50	>1.000 mg/l	microorganisms	3 h
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1-amine, (Z)-	147900-93-4	NOELR	≥100 mg/l	aquatic invertebrates	21 d
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1-amine, (Z)-	147900-93-4	growth (EbCx) 20%	>1.000 mg/l	microorganisms	3 h

12.2 Persistence and degradability

Degradability of components					
Name of substance	CAS No	Process	Degradation rate	Time	Method
dimethyl ether	115-10-6	oxygen depletion	5 %	28 d	
Acetone	67-64-1	carbon dioxide generation	90,9 %	28 d	
Hydrocarbons, C9, aromatics	128601-23-0	oxygen depletion	30,9 %	2 d	
reaction mass of ethylbenzene and xy-		oxygen depletion	94 %	28 d	

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

Degradability of components					
Name of substance	CAS No	Process	Degradation rate	Time	Method
lene					
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1- amine, (Z)-	147900-93-4	oxygen depletion	27 %	28 d	

12.3 Bioaccumulative potential

Bioaccumulative potential of components				
Name of substance	CAS No	BCF	Log KOW	BOD5/COD
dimethyl ether	115-10-6		0,07 (25 °C)	
Zinc	7440-66-6	69,48		
Acetone	67-64-1		-0,23	
Hydrocarbons, C9, aromatics	128601-23-0	≥30,85 – ≤467	3,03 – 4,73 (20 °C)	
reaction mass of ethylbenzene and xylene		56,49	3,12 (20 °C)	
Zinc oxide	1314-13-2	1.050		
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1- amine, (Z)-	147900-93-4		>5,7 (20 °C)	

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of ≥ 0,1%.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment.

Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Relevant provisions relating to waste

List of wastes, Decision 2000/532/EC on the list of waste

- product
08 01 11* waste paint and varnish containing organic solvents or other hazardous substances
- packagings
15 01 04 metallic packaging
15 01 10* packaging containing residues of or contaminated by hazardous substances

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID/ADN	UN 1950
IMDG-Code	UN 1950
ICAO-TI	UN 1950

14.2 UN proper shipping name

ADR/RID/ADN	AEROSOLS flammable
IMDG-Code	AEROSOLS
ICAO-TI	Aerosols, flammable

14.3 Transport hazard class(es)

ADR/RID/ADN	2 (2.1)
IMDG-Code	2.1
ICAO-TI	2.1

14.4 Packing group

not assigned

14.5 Environmental hazards

hazardous to the aquatic environment

Environmentally hazardous substance (aquatic environment)	Zinc
---	------

14.6 Special precautions for user

There is no additional information.

14.7 Maritime transport in bulk according to IMO instruments

No data available.

Additional information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - additional information

Classification code	5F
Danger label(s)	2.1



Environmental hazards	yes (hazardous to the aquatic environment)
Special provisions (SP)	190, 327, 344, 625
Excepted quantities (EQ)	E0
Limited quantities (LQ)	1 L
Transport category (TC)	2
Tunnel restriction code (TRC)	D

International Maritime Dangerous Goods Code (IMDG) - additional information

Marine pollutant	yes (hazardous to the aquatic environment)
------------------	--

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

Danger label(s)

2.1



Special provisions (SP)

63, 190, 277, 327, 344, 381, 959

Excepted quantities (EQ)

E0

Limited quantities (LQ)

1 L

EmS

F-D, S-U

Stowage category

-

International Civil Aviation Organization (ICAO-IATA/DGR) - additional information

Environmental hazards

yes (hazardous to the aquatic environment)

Danger label(s)

2.1



Special provisions (SP)

A145, A167

Excepted quantities (EQ)

E0

Limited quantities (LQ)

30 kg

SECTION 15: Regulatory information

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

This Safety Data Sheet is purely informative and does comply with EU regulations, but not with country-specific regulations.

Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

Name	Name acc. to inventory	Restriction	No
Zinc	substances in tattoo inks and permanent make-up	R75	75
Zinc oxide	substances in tattoo inks and permanent make-up	R75	75
Acetone	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC	R3	3
Acetone	flammable / pyrophoric	R40	40
Acetone	substances in tattoo inks and permanent make-up	R75	75
Fatty acids, C-18, unsatd. trimers, compd. with 9-octadecen-1- amine, (Z)-	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC	R3	3
Hydrocarbons, C9, aromatics	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC	R3	3
Hydrocarbons, C9, aromatics	flammable / pyrophoric	R40	40
dimethyl ether	flammable / pyrophoric	R40	40
reaction mass of ethylbenzene and xylene	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC	R3	3

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

Name	Name acc. to inventory	Restriction	No
reaction mass of ethylbenzene and xylene	flammable / pyrophoric	R40	40

Legend

- R3**
- Shall not be used in:
 - ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ash-trays,
 - tricks and jokes,
 - games for one or more participants, or any article intended to be used as such, even with ornamental aspects,
 - Articles not complying with paragraph 1 shall not be placed on the market.
 - Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:
 - can be used as fuel in decorative oil lamps for supply to the general public, and
 - present an aspiration hazard and are labelled with H304.
 - Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).
 - Without prejudice to the implementation of other Union provisions relating to the classification, labelling and packaging of substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:
 - lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil – or even sucking the wick of lamps – may lead to life-threatening lung damage";
 - grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter fluid may lead to life threatening lung damage";
 - lamps oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.;
- R40**
- Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:
 - metallic glitter intended mainly for decoration,
 - artificial snow and frost,
 - 'whoopie' cushions,
 - silly string aerosols,
 - imitation excrement,
 - horns for parties,
 - decorative flakes and foams,
 - artificial cobwebs,
 - stink bombs.
 - Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with: 'For professional users only'.
 - By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/324/EEC (2).
 - The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.
- R75**
- Shall not be placed on the market in mixtures for use for tattooing purposes, and mixtures containing any such substances shall not be used for tattooing purposes, after 4 January 2022 if the substance or substances in question is or are present in the following circumstances:
 - in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;
 - in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as reproductive toxicant category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;
 - in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin sensitiser category 1, 1A or 1B, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;
 - in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin corrosive category 1, 1A, 1B or 1C or skin irritant category 2, or as serious eye damage category 1 or eye irritant category 2, the substance is present in the mixture in a concentration equal to or greater than:
 - 0,1 % by weight, if the substance is used solely as a pH regulator;
 - 0,01 % by weight, in all other cases;
 - in the case of a substance listed in Annex II to Regulation (EC) No 1223/2009 (*1), the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;
 - in the case of a substance for which a condition of one or more of the following kinds is specified in column g (Product type, Body parts) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight:
 - "Rinse-off products";
 - "Not to be used in products applied on mucous membranes";
 - "Not to be used in eye products";
 - in the case of a substance for which a condition is specified in column h (Maximum concentration in ready for use preparation) or column i (Other) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration, or in some other way, that does not accord with the condition specified in that column;
 - in the case of a substance listed in Appendix 13 to this Annex, the substance is present in the mixture in a concentration equal to or greater than the concentration limit specified for that substance in that Appendix.
 - For the purposes of this entry use of a mixture "for tattooing purposes" means injection or introduction of the mixture into a person's skin, mucous membrane or eyeball, by any process or procedure (including procedures commonly referred to as permanent make-up, cosmetic tattooing, micro-blading and micro-pigmentation), with the aim of making a mark or design on his or her body.
 - If a substance not listed in Appendix 13 falls within more than one of points (a) to (g) of paragraph 1, the strictest concentration limit laid down in the points in question shall apply to that substance. If a substance listed in Appendix 13 also falls within one or more of

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

Legend

points (a) to (g) of paragraph 1, the concentration limit laid down in point (h) of paragraph 1 shall apply to that substance.

4. By way of derogation, paragraph 1 shall not apply to the following substances until 4 January 2023:

(a) Pigment Blue 15:3 (CI 74160, EC No 205-685-1, CAS No 147-14-8);

(b) Pigment Green 7 (CI 74260, EC No 215-524-7, CAS No 1328-53-6).

5. If Part 3 of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a substance such that the substance then becomes caught by point (a), (b), (c) or (d) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the date of application of that new or revised classification is after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect on the date of application of that new or revised classification.

6. If Annex II or Annex IV to Regulation (EC) No 1223/2009 is amended after 4 January 2021 to list or change the listing of a substance such that the substance then becomes caught by point (e), (f) or (g) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the amendment takes effect after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect from the date falling 18 months after entry into force of the act by which that amendment was made.

7. Suppliers placing a mixture on the market for use for tattooing purposes shall ensure that, after 4 January 2022, the mixture is marked with the following information:

(a) the statement "Mixture for use in tattoos or permanent make-up";

(b) a reference number to uniquely identify the batch;

(c) the list of ingredients in accordance with the nomenclature established in the glossary of common ingredient names pursuant to Article 33 of Regulation (EC) No 1223/2009, or in the absence of a common ingredient name, the IUPAC name. In the absence of a common ingredient name or IUPAC name, the CAS and EC number. Ingredients shall be listed in descending order by weight or volume of the ingredients at the time of formulation. "Ingredient" means any substance added during the process of formulation and present in the mixture for use for tattooing purposes. Impurities shall not be regarded as ingredients. If the name of a substance, used as ingredient within the meaning of this entry, is already required to be stated on the label in accordance with Regulation (EC) No 1272/2008, that ingredient does not need to be marked in accordance with this Regulation;

(d) the additional statement "pH regulator" for substances falling under point (d)(i) of paragraph 1;

(e) the statement "Contains nickel. Can cause allergic reactions." if the mixture contains nickel below the concentration limit specified in Appendix 13;

(f) the statement "Contains chromium (VI). Can cause allergic reactions." if the mixture contains chromium (VI) below the concentration limit specified in Appendix 13;

(g) safety instructions for use insofar as they are not already required to be stated on the label by Regulation (EC) No 1272/2008.

The information shall be clearly visible, easily legible and marked in a way that is indelible.

The information shall be written in the official language(s) of the Member State(s) where the mixture is placed on the market, unless the Member State(s) concerned provide(s) otherwise.

Where necessary because of the size of the package, the information listed in the first subparagraph, except for point (a), shall be included instead in the instructions for use.

Before using a mixture for tattooing purposes, the person using the mixture shall provide the person undergoing the procedure with the information marked on the package or included in the instructions for use pursuant to this paragraph.

8. Mixtures that do not contain the statement "Mixture for use in tattoos or permanent make-up" shall not be used for tattooing purposes.

9. This entry does not apply to substances that are gases at temperature of 20 °C and pressure of 101,3 kPa, or generate a vapour pressure of more than 300 kPa at temperature of 50 °C, with the exception of formaldehyde (CAS No 50-00-0, EC No 200-001-8).

10. This entry does not apply to the placing on the market of a mixture for use for tattooing purposes, or to the use of a mixture for tattooing purposes, when placed on the market exclusively as a medical device or an accessory to a medical device, within the meaning of Regulation (EU) 2017/745, or when used exclusively as a medical device or an accessory to a medical device, within the same meaning. Where the placing on the market or use may not be exclusively as a medical device or an accessory to a medical device, the requirements of Regulation (EU) 2017/745 and of this Regulation shall apply cumulatively.

List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

None of the ingredients are listed.

Seveso Directive

2012/18/EU (Seveso III)			
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements	Notes
E1	environmental hazards (hazardous to the aquatic environment, cat. 1)	100 200	56)

Notation

56) hazardous to the Aquatic Environment in category Acute 1 or Chronic 1

Directive on industrial emissions (VOCs, 2010/75/EU)

VOC content	59,21 %
-------------	---------

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

Pollutant release and transfer registers (PRTR)			
Name acc. to inventory	CAS No	Remarks	Threshold for releases to air (kg/year)
zinc	7440-66-6	(8)	200

Legend

(8) All metals shall be reported as the total mass of the element in all chemical forms present in the release

Water Framework Directive (WFD)

List of pollutants (WFD)				
Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
Zinc	Metals and their compounds		a)	
Zinc oxide	Substances and preparations, or the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine-related functions in or via the aquatic environment		a)	
Zinc oxide	Metals and their compounds		a)	
Acetone	Substances and preparations, or the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine-related functions in or via the aquatic environment		a)	

Legend

a) Indicative list of the main pollutants

Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors, amending Regulation (EC) No 1907/2006 and repealing Regulation (EU) No 98/2013

Explosives precursors which are subject to restrictions					
Name acc. to inventory	CAS No	Type of registration	Remarks	Limit value	Upper limit value for the purpose of licensing under Article 5(3)
acetone	67-64-1	Annex II			

Legend

Annex II Substances on their own or in mixtures or in substances for which suspicious transactions shall be reported

Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2000/39/EC	Commission Directive establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
ADR/RID/ADN	Agreements concerning the International Carriage of Dangerous Goods by Road/Rail/Inland Waterways (ADR/RID/ADN)
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
Asp. Tox.	Aspiration hazard
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EbC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EINECS	European Inventory of Existing Commercial Chemical Substances
EL50	Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Gas	Flammable gas
Flam. Liq.	Flammable liquid

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

Abbr.	Descriptions of used abbreviations
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
IOELV	Indicative occupational exposure limit value
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
LEL	Lower explosion limit (LEL)
LL50	Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 50 % lethality
LOEC	Lowest Observed Effect Concentration
log KOW	n-Octanol/water
NLP	No-Longer Polymer
NOEC	No Observed Effect Concentration
NOELR	No Observed Effect Loading Rate
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
Press. Gas	Gas under pressure
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitisation
STEL	Short-term exposure limit
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure
SVHC	Substance of Very High Concern
TWA	Time-weighted average
UEL	Upper explosion limit (UEL)
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Zinc spray

Version number: 1.0

Date of compilation: 17.11.2025

UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
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.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
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.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.