

Hilti Zinc spray MZN-400

Safety Data Sheet

According to SS 586 Part 3: 2014

Version: 1.0

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

1.1. Product identifier

Product form	Mixture
Product name	Hilti Zinc spray MZN-400
Type of product	Aerosol
Product code	BU Installation



1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended uses and restrictions	For professional use only
Recommended use	Paint, corrosion-protection product

1.4. Supplier's details

Supplier
Hilti Far East Private Ltd.
No 20 Harbour Drive,
#06-06/08 PSA Vista
117612 Singapore - Singapur
T +65 6777 7887 - F +65 6777 3057
sg-customerservice@hilti.com

Department issuing data specification sheet
Hilti Entwicklungsgesellschaft mbH
Hiltistraße 6
86916 Kaufering - Deutschland
T +49 8191 906876
anchor.hse@hilti.com

1.5. Emergency telephone number

Emergency number	Schweizerisches Toxikologisches Informationszentrum – 24h Service +41 44 251 51 51 (international) +65 6777 7887
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Physical hazards	Aerosol, Category 1
Environmental hazards	Hazardous to the aquatic environment — Acute Hazard, Category 1 Hazardous to the aquatic environment — Chronic Hazard, Category 1

2.2. Label elements

Hazard pictograms (GHS SG)



Signal word (GHS SG)

Danger

Hazard statements (GHS SG)

Extremely flammable aerosol. (H222)
Pressurised container: May burst if heated. (H229)
Very toxic to aquatic life with long lasting effects. (H410)

Precautionary statements

Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)
Do not spray on an open flame or other ignition source. (P211)
Do not pierce or burn, even after use. (P251)
Use only outdoors or in a well-ventilated area. (P271)
Do not breathe dust/fume/gas/mist/vapours/spray. (P260)

Storage

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. (P410+P412)

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2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Concentration (%)	Formula	Product identifier	GHS SG classification
zinc powder - zinc dust (stabilised)	25 – 40	Zn	(CAS-No.) 7440-66-6 (EC-No.) 231-175-3 (EC Index-No.) 030-001-01-9	Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
Xylene	5 – 10	C8H10	(CAS-No.) 1330-20-7 (EC-No.) 215-535-7 (EC Index-No.) 601-022-00-9	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315
ethyl acetate	5 – 10	C4H8O2	(CAS-No.) 141-78-6 (EC-No.) 205-500-4 (EC Index-No.) 607-022-00-5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
1-methoxypropan-2-ol	5 – 10	C4H10O2	(CAS-No.) 107-98-2 (EC-No.) 203-539-1 (EC Index-No.) 603-064-00-3	Flam. Liq. 3, H226 STOT SE 3, H336
Low boiling point naphtha, benzene < 0.1%	5 – 10		(CAS-No.) 64742-95-6 (EC-No.) 265-199-0 (EC Index-No.) 649-356-00-4	Flam. Liq. 3, H226 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
zinc oxide	5 – 10	ZnO	(CAS-No.) 1314-13-2 (EC-No.) 215-222-5 (EC Index-No.) 030-013-00-7	Acute Tox. Not classified (Oral) Acute Tox. Not classified (Dermal) Acute Tox. Not classified (Inhalation:dust,mist) Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Ethylbenzene	2.5 – 5	C8H10	(CAS-No.) 100-41-4 (EC-No.) 202-849-4 (EC Index-No.) 601-023-00-4	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 STOT RE 2, H373 Asp. Tox. 1, H304

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

Take off immediately all contaminated clothing.

Inhalation

Remove person to fresh air and keep comfortable for breathing.

Skin contact

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

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

Ingestion

Get immediate medical advice/attention.

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

Symptoms/effects after inhalation

May cause drowsiness or dizziness. Effects of skin contact may include: skin irritation.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide. Foam. Dry powder.

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Unsuitable extinguishing media Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	Extremely flammable aerosol.
Explosion hazard	Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Hazardous decomposition products in case of fire	Formation of toxic gases is possible during heating or in case of fire. Thermal decomposition generates : Carbon dioxide. Carbon monoxide. Nitrogen oxides.

5.3. Special Protective actions for the fire fighters

Precautionary measures fire	Fight fire remotely due to the risk of explosion.
Firefighting instructions	DO NOT fight fire when fire reaches explosives. Evacuate area.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Evacuate area. No flames, no sparks. Eliminate all sources of ignition.

6.1.1. For non-emergency personnel

Emergency procedures Ventilate spillage area. Avoid breathing vapours. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	Do not attempt to take action without suitable protective equipment. Breathing apparatus.
Emergency procedures	Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Do not flush with water. Absorb and/or contain spill with inert material, then place in suitable container. This material and its container must be disposed of in a safe way, and as per local legislation.
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6.4. Reference to other sections

For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	Hazardous waste due to potential risk of explosion. Do not pierce or burn, even after use.
Precautions for safe handling	Do not eat, drink or smoke when using this product. Do not breathe vapours. Avoid contact with skin, eyes and clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Hygiene measures	Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	Proper grounding procedures to avoid static electricity should be followed.
Storage conditions	Keep cool. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Keep in fireproof place.
Incompatible materials	Oxidizing materials. Paper. Strong acids. Strong bases.
Storage temperature	5 – 25 °C
Heat and ignition sources	Keep away from heat and direct sunlight.

7.3. Specific end use(s)

No additional information available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hilti Zinc spray MZN-400	
Singapore - Occupational Exposure Limits	
OEL PEL (mg/m ³)	434 mg/m ³
OEL PEL (ppm)	100 ppm
OEL STEL (mg/m ³)	543 mg/m ³
OEL STEL (ppm)	125 ppm
Regulatory reference	WSH Regulations 2014
Xylene (1330-20-7)	
Singapore - Occupational Exposure Limits	
OEL PEL (mg/m ³)	434 mg/m ³
OEL PEL (ppm)	100 ppm
OEL STEL (mg/m ³)	651 mg/m ³
OEL STEL (ppm)	150 ppm
Regulatory reference	WSH Regulations 2014
Ethylbenzene (100-41-4)	
Singapore - Occupational Exposure Limits	
OEL PEL (mg/m ³)	434 mg/m ³
OEL PEL (ppm)	100 ppm
OEL STEL (mg/m ³)	543 mg/m ³
OEL STEL (ppm)	125 ppm
Regulatory reference	WSH Regulations 2014

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

Appropriate engineering controls Ensure good ventilation of the work station.

8.4. Personal protective equipment

Hand protection In case of repeated or prolonged contact wear gloves

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,4		EN ISO 374

Eye protection Chemical goggles or safety glasses. EN 166. EN 170

Type	Use	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

Respiratory protection During spraying wear suitable respiratory equipment

Device	Filter type	Condition	Standard
Aerosol mask			

Personal protective equipment symbol(s)



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Aerosol.
Colour	No data available
Odour	No data available
Odour threshold	No data available
pH	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	-42 °C
Flash point	-25 °C (DIN EN ISO 1523)
Auto-ignition temperature	273 °C (DIN 51794)
Decomposition temperature	No data available
Flammability (solid, gas)	Extremely flammable aerosol.
Vapour pressure	3.2 hPa (DIN EN 12)
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	1.051 g/cm ³
Solubility	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Partition coefficient n-octanol/water (Log Kow)	No data available
Viscosity, dynamic	No data available
Explosive properties	No data available
Oxidising properties	No data available
Explosive limits	1 – 13.1 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Heat. Sparks. Open flame. Direct sunlight. Overheating.

10.5. Incompatible materials

Oxidizing agents and bases.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

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11.1. Information on toxicological effects

Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified

zinc powder - zinc dust (stabilised) (7440-66-6)	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))

ethyl acetate (141-78-6)	
LD50 oral rat	10200 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 20000 mg/kg bodyweight (24 hour cuff method, 24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))

1-methoxypropan-2-ol (107-98-2)	
LD50 oral rat	4016 mg/kg bodyweight (EU Method B.1 tris: Acute oral toxic – Acute toxic class method, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight (Equivalent or similar to EU Method B.3, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))

Xylene (1330-20-7)	
LC50 Inhalation - Rat	29.09 mg/l (Equivalent or similar to EU Method B.2: Acute Toxicity (Inhalation), 4 h, Rat, Male, Experimental value, Inhalation (vapours), 14 day(s))

zinc oxide (1314-13-2)	
LD50 oral rat	> 5000 mg/kg (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 5.7 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (dust), 14 day(s))

Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified

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Density	1.051 g/cm ³

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SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	Very toxic to aquatic life with long lasting effects.

zinc powder - zinc dust (stabilised) (7440-66-6)	
BCF fish 1	0.002 (40 day(s), Danio rerio, Semi-static system, Fresh water, Read-across)
ethyl acetate (141-78-6)	
LC50 fish 1	230 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)
BCF fish 1	30 (3 day(s), Leuciscus idus, Static renewal, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	0.68 (Experimental value, EPA OPPTS 830.7560, 25 °C)
1-methoxypropan-2-ol (107-98-2)	
LC50 fish 1	≥ 1000 mg/l (Equivalent or similar to OECD 203, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, Lethal)
ErC50 (algae)	> 1000 mg/l (7 day(s), Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)
Partition coefficient n-octanol/water (Log Pow)	< 1 (Experimental value, Equivalent or similar to OECD 117, 20 °C)
Partition coefficient n-octanol/water (Log Koc)	0.152 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Xylene (1330-20-7)	
LC50 fish 1	2.6 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static renewal, Fresh water, Read-across, Lethal)
ErC50 (algae)	4.36 mg/l (OECD 201: Alga, Growth Inhibition Test, 73 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
BCF fish 1	7.2 – 25.9 (56 day(s), Oncorhynchus mykiss, Flow-through system, Fresh water, Read-across)
Partition coefficient n-octanol/water (Log Pow)	3.2 (Read-across, 20 °C)
Partition coefficient n-octanol/water (Log Koc)	2.73 (log Koc, Equivalent or similar to OECD 121, Read-across)
Ethylbenzene (100-41-4)	
LC50 fish 1	5.1 mg/l (ASTM, 96 h, Menidia menidia, Flow-through system, Salt water, Experimental value, Lethal)
LC50 fish 2	4.2 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 1	1.8 – 2.4 mg/l (US EPA, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
EC50 Daphnia 2	75 mg/l (48 h; Daphnia magna)
EC50 other aquatic organisms 1	48 mg/l (72 h; Scenedesmus subspicatus)
EC50 72h algae (1)	5.4 mg/l (US EPA, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Cell numbers)
BCF fish 1	1 (6 week(s), Oncorhynchus kisutch, Flow-through system, Salt water, Experimental value)
BCF fish 2	15 – 79 (Carassius auratus)
BCF other aquatic organisms 1	4.68 (Lamellibranchiata)
Partition coefficient n-octanol/water (Log Pow)	3.6 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Partition coefficient n-octanol/water (Log Koc)	2.71 (log Koc, PCKOCWIN v1.66, QSAR)
TLM fish 1	29 ppm (96 h; Lepomis macrochirus; Hard water)
TLM fish 2	42.3 mg/l (96 h; Pimephales promelas)
TLM other aquatic organisms 1	10 - 100,96 h
Threshold limit algae 1	> 160 mg/l (192 h; Scenedesmus quadricauda; Toxicity test)
Threshold limit algae 2	33 mg/l (192 h; Microcystis aeruginosa; Toxicity test)
zinc oxide (1314-13-2)	
LC50 fish 1	1.55 mg/l (96 h, Danio rerio, Static system, Fresh water, Experimental value, Lethal)
EC50 Daphnia 1	1 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Zinc ion)
Partition coefficient n-octanol/water (Log Pow)	1.53 (Estimated value)
Partition coefficient n-octanol/water (Log Koc)	2.2 (log Koc, Literature study)

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12.2. Persistence and degradability

Hilti Zinc spray MZN-400	
Persistence and degradability	No additional information available
zinc powder - zinc dust (stabilised) (7440-66-6)	
Not rapidly degradable	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
ethyl acetate (141-78-6)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.293 g O ₂ /g substance
Chemical oxygen demand (COD)	1.69 g O ₂ /g substance
ThOD	1.82 g O ₂ /g substance
1-methoxypropan-2-ol (107-98-2)	
Persistence and degradability	Readily biodegradable in the soil. Readily biodegradable in water.
ThOD	1.95 g O ₂ /g substance
Xylene (1330-20-7)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Ethylbenzene (100-41-4)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.44 g O ₂ /g substance
Chemical oxygen demand (COD)	2.1 g O ₂ /g substance
ThOD	3.17 g O ₂ /g substance
BOD (% of ThOD)	(20 day(s)) 45.4
zinc oxide (1314-13-2)	
Persistence and degradability	Biodegradability in soil: not applicable. Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

12.3. Bioaccumulative potential

Hilti Zinc spray MZN-400	
Bioaccumulative potential	No additional information available
zinc powder - zinc dust (stabilised) (7440-66-6)	
BCF fish 1	0.002 (40 day(s), Danio rerio, Semi-static system, Fresh water, Read-across)
Bioaccumulative potential	Bioaccumulation: not applicable.
ethyl acetate (141-78-6)	
BCF fish 1	30 (3 day(s), Leuciscus idus, Static renewal, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	0.68 (Experimental value, EPA OPPTS 830.7560, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
1-methoxypropan-2-ol (107-98-2)	
Partition coefficient n-octanol/water (Log Pow)	< 1 (Experimental value, Equivalent or similar to OECD 117, 20 °C)
Partition coefficient n-octanol/water (Log Koc)	0.152 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Xylene (1330-20-7)	
BCF fish 1	7.2 – 25.9 (56 day(s), Oncorhynchus mykiss, Flow-through system, Fresh water, Read-across)
Partition coefficient n-octanol/water (Log Pow)	3.2 (Read-across, 20 °C)
Partition coefficient n-octanol/water (Log Koc)	2.73 (log Koc, Equivalent or similar to OECD 121, Read-across)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

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Ethylbenzene (100-41-4)	
BCF fish 1	1 (6 week(s), Oncorhynchus kisutch, Flow-through system, Salt water, Experimental value)
BCF fish 2	15 – 79 (Carassius auratus)
BCF other aquatic organisms 1	4.68 (Lamellibranchiata)
Partition coefficient n-octanol/water (Log Pow)	3.6 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Partition coefficient n-octanol/water (Log Koc)	2.71 (log Koc, PCKOCWIN v1.66, QSAR)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

zinc oxide (1314-13-2)	
Partition coefficient n-octanol/water (Log Pow)	1.53 (Estimated value)
Partition coefficient n-octanol/water (Log Koc)	2.2 (log Koc, Literature study)
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

Hilti Zinc spray MZN-400	
Mobility in soil	No additional information available

zinc powder - zinc dust (stabilised) (7440-66-6)	
Ecology - soil	Adsorbs into the soil.

ethyl acetate (141-78-6)	
Surface tension	No data available in the literature
Partition coefficient n-octanol/water (Log Pow)	0.68 (Experimental value, EPA OPPTS 830.7560, 25 °C)
Ecology - soil	Low potential for adsorption in soil.

1-methoxypropan-2-ol (107-98-2)	
Surface tension	0.0707 N/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)
Partition coefficient n-octanol/water (Log Pow)	< 1 (Experimental value, Equivalent or similar to OECD 117, 20 °C)
Partition coefficient n-octanol/water (Log Koc)	0.152 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

Xylene (1330-20-7)	
Surface tension	28.01 – 29.76 mN/m (25 °C)
Partition coefficient n-octanol/water (Log Pow)	3.2 (Read-across, 20 °C)
Partition coefficient n-octanol/water (Log Koc)	2.73 (log Koc, Equivalent or similar to OECD 121, Read-across)
Ecology - soil	Low potential for adsorption in soil. May be harmful to plant growth, blooming and fruit formation.

Ethylbenzene (100-41-4)	
Surface tension	71.2 mN/m (23 °C, 0.058 g/l, EU Method A.5: Surface tension)
Partition coefficient n-octanol/water (Log Pow)	3.6 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Partition coefficient n-octanol/water (Log Koc)	2.71 (log Koc, PCKOCWIN v1.66, QSAR)
Ecology - soil	Low potential for adsorption in soil. Toxic to soil organisms.

zinc oxide (1314-13-2)	
Surface tension	Not applicable (solid)
Partition coefficient n-octanol/water (Log Pow)	1.53 (Estimated value)
Partition coefficient n-octanol/water (Log Koc)	2.2 (log Koc, Literature study)
Ecology - soil	Low potential for adsorption in soil.

12.5. Results of PBT and vPvB assessment

Component	
zinc powder - zinc dust (stabilised) (7440-66-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Xylene (1330-20-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
ethyl acetate (141-78-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
1-methoxypropan-2-ol (107-98-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
zinc oxide (1314-13-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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Component	
Ethylbenzene (100-41-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects





Ozone	Not classified
Other adverse effects	No additional information available

SECTION 13: Disposal considerations

Waste treatment methods	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	Container under pressure. Do not drill or burn even after use.
Additional information	Flammable vapours may accumulate in the container.

SECTION 14: Transport information

In accordance with ADR / IATA / IMDG / RID

ADR	IMDG	IATA	RID
14.1. UN number			
UN 1950	UN 1950	UN 1950	UN 1950
14.2. UN proper shipping name			
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS
Transport document description			
UN 1950 AEROSOLS, 2.1, (D)	UN 1950 AEROSOLS, 2.1	UN 1950 Aerosols, flammable, 2.1	UN 1950 AEROSOLS, 2.1
14.3. Transport hazard class(es)			
2.1	2.1	2.1	2.1
			
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
Environmentally hazardous substances derogation applies (quantity of liquids ≤ 5 litres or net mass of solids ≤ 5 kg). The environmentally hazardous substance mark is therefore not required, as stated in the ADR regulation, section 5.2.1.8.1.			
No supplementary information available			

14.6. Special precautions for user

Overland transport

Classification code (ADR)	5F
Special provisions (ADR)	190, 327, 344, 625
Limited quantities (ADR)	1I
Packing instructions (ADR)	P207, LP02
Transport category (ADR)	2
Tunnel restriction code (ADR)	D

Transport by sea

Special provisions (IMDG)	63, 190, 277, 327, 344, 959
Limited quantities (IMDG)	SP277
Packing instructions (IMDG)	P207, LP02
EmS-No. (Fire)	F-D

Hilti Zinc spray MZN-400

Safety Data Sheet

According to SS 586 Part 3: 2014

EmS-No. (Spillage)	S-U
Stowage category (IMDG)	None
Air transport	
PCA packing instructions (IATA)	203
PCA max net quantity (IATA)	75kg
CAO packing instructions (IATA)	203
Special provisions (IATA)	A145, A167
Rail transport	
Special provisions (RID)	190, 327, 344, 625
Limited quantities (RID)	1L
Packing instructions (RID)	P207, LP02

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

No additional information available

15.2. International Regulations

No additional information available

15.3. Chemical inventory status

Australia AICS	No
Canada DSL	No
Canada NDSL	No
China IECSC	No
EU EINECS	No
EU ELINCS	No
EU NLP	No
Korea ECL	No
US TSCA	No

SECTION 16: Other information

Data sources REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

SDS_SG_Hilti

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.