

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Zinc Paste Silver
Revision date : 07.10.2020
Print date : 12.11.2020

Version (Revision) : 5.0.1 (5.0.0)

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

1.1 Product identifier

Zinc Paste Silver

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

Relevant identified uses

Coatings and paints, fillers, putties, thinners

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

Bio-Circle Surface Technology GmbH

Street : Berensweg 200

Postal code/city : 33334 Gütersloh

Telephone : +49 5241 9443 0

Telefax : +49 5241 9443 44

Information contact : labor@bio-circle.de

1.4 Emergency telephone number

+49 5241 9443 51 during normal office hours

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Flam. Liq. 3 ; H226 - Flammable liquids : Category 3 ; Flammable liquid and vapour.

Skin Irrit. 2 ; H315 - Skin corrosion/irritation : Category 2 ; Causes skin irritation.

STOT SE 3 ; H336 - STOT-single exposure : Category 3 ; May cause drowsiness or dizziness.

Asp. Tox. 1 ; H304 - Aspiration hazard : Category 1 ; May be fatal if swallowed and enters airways.

Aquatic Chronic 2 ; H411 - Hazardous to the aquatic environment : Chronic 2 ; Toxic to aquatic life with long lasting effects.

2.2 Label elements

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

Hazard pictograms



Flame (GHS02) · Health hazard (GHS08) · Environment (GHS09) · Exclamation mark (GHS07)

Signal word

Danger

Hazard components for labelling

NAPHTA (PETROLEUM), LIGHT AROMATIC ; CAS No. : 64742-95-6

XYLENE ; CAS No. : 1330-20-7

Hazard statements

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

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P243 Take action to prevent static discharges.
P273 Avoid release to the environment.
P312 Call a POISON CENTER/doctor/... if you feel unwell.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/....
P332+P313 If skin irritation occurs: Get medical advice/attention.
P331 Do NOT induce vomiting.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

Supplemental Hazard information (EU)

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

NAPHTHA (PETROLEUM), LIGHT AROMATIC ; REACH No. : 01-2119455851-35-XXXX ; EC No. : 918-668-5; CAS No. : 64742-95-6

Weight fraction : $\geq 20 - < 25 \%$
Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Asp. Tox. 1 ; H304 STOT SE 3 ; H335 STOT SE 3 ; H336 Aquatic Chronic 2 ; H411

XYLENE ; REACH No. : 01-2119488216-32-XXXX ; EC No. : 215-535-7; CAS No. : 1330-20-7

Weight fraction : $\geq 10 - < 25 \%$
Classification 1272/2008 [CLP] : Flam. Liq. 3 ; H226 Acute Tox. 4 ; H312 Acute Tox. 4 ; H332 Skin Irrit. 2 ; H315

ZINC POWDER - ZINC DUST (STABILIZED) ; REACH No. : 01-2119467174-37-XXXX ; EC No. : 231-175-3; CAS No. : 7440-66-6

Weight fraction : $\geq 10 - < 25 \%$
Classification 1272/2008 [CLP] : Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410

ALUMINIUM POWDER (STABILIZED) ; REACH No. : 01-2119529243-45-XXXX ; EC No. : 231-072-3; CAS No. : 7429-90-5

Weight fraction : $\geq 10 - < 25 \%$
Classification 1272/2008 [CLP] : Flam. Sol. 1 ; H228 Water-react. 2 ; H261

NAPHTHA (PETROLEUM), HYDROTREATED HEAVY ; REACH No. : 01-2119486659-16-XXXX ; EC No. : 265-150-3; CAS No. : 64742-48-9

Weight fraction : $\geq 5 - < 10 \%$
Classification 1272/2008 [CLP] : Asp. Tox. 1 ; H304

ETHYLBENZENE ; EC No. : 202-849-4; CAS No. : 100-41-4

Weight fraction : $\geq 1 - < 5 \%$
Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Asp. Tox. 1 ; H304 STOT RE 2 ; H373 Acute Tox. 4 ; H332 Aquatic Chronic 3 ; H412

PROPAN-2-OL ; REACH No. : 01-2119457558-25-XXXX ; EC No. : 200-661-7; CAS No. : 67-63-0

Weight fraction : $\geq 1 - < 5 \%$
Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Eye Irrit. 2 ; H319 STOT SE 3 ; H336

2-BUTANONE OXIME ; REACH No. : 01-2119539477-28-XXXX ; EC No. : 202-496-6; CAS No. : 96-29-7

Weight fraction : $\geq 0,5 - < 1 \%$
Classification 1272/2008 [CLP] : Carc. 2 ; H351 Eye Dam. 1 ; H318 Acute Tox. 4 ; H312 Skin Sens. 1 ; H317

TOLUENE ; EC No. : 203-625-9; CAS No. : 108-88-3

Weight fraction : $< 0,5 \%$
Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Asp. Tox. 1 ; H304 Repr. 2 ; H361d STOT RE 2 ; H373 Skin Irrit. 2 ; H315 STOT SE 3 ; H336

Additional information

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

SECTION 4: First aid measures

4.1 Description of first aid measures

When in doubt or if symptoms are observed, get medical advice.

General information

When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Remove contaminated, saturated clothing immediately.

Following inhalation

Remove casualty to fresh air and keep warm and at rest.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Rub greasy ointment into the skin.

After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye.

After ingestion

Rinse mouth thoroughly with water. Let 1 glass of water be drunken in little sips (dilution effect). Do NOT induce vomiting. Call a physician immediately.

Self-protection of the first aider

First aider: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water Foam Extinguishing powder Carbon dioxide (CO₂) Sand Nitrogen Extinguishing blanket

Unsuitable extinguishing media

Full water jet

5.2 Special hazards arising from the substance or mixture

Contact with water liberates extremely flammable gases.

5.3 Advice for firefighters

Co-ordinate fire-fighting measures to the fire surroundings. Apply foam in abundant quantities since some of it gets destroyed by the product. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protection equipment. Remove all sources of ignition.

6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed

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and suitable containers for disposal.

6.4 Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep container tightly closed. Ensure adequate ventilation of the storage area.

7.2 Conditions for safe storage, including any incompatibilities

Ensure adequate ventilation of the storage area. Keep container tightly closed in a cool, well-ventilated place.

Hints on joint storage

Storage class (TRGS 510) : 4.3

Keep away from

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

7.3 Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

ETHYLBENZENE ; CAS No. : 100-41-4

Limit value type (country of origin) : TRGS 900 (D)
Limit value : 20 ppm / 88 mg/m³
Peak limitation : 2(II)
Remark : H, Y
Version : 29.03.2019

Limit value type (country of origin) : STEL (EC)
Limit value : 200 ppm / 884 mg/m³
Remark : Skin
Version : 20.06.2019

Limit value type (country of origin) : TWA (EC)
Limit value : 100 ppm / 442 mg/m³
Remark : Skin
Version : 20.06.2019

PROPAN-2-OL ; CAS No. : 67-63-0

Limit value type (country of origin) : TRGS 900 (D)
Limit value : 200 ppm / 500 mg/m³
Peak limitation : 2(II)
Remark : Y
Version : 29.03.2019

2-BUTANONE OXIME ; CAS No. : 96-29-7

Limit value type (country of origin) : TRGS 900 (D)
Limit value : 0,3 ppm / 1 mg/m³
Peak limitation : 8(I)
Remark : Y, H, Sh
Version : 29.03.2019

TOLUENE ; CAS No. : 108-88-3

Limit value type (country of origin) : TRGS 900 (D)
Limit value : 50 ppm / 190 mg/m³

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Peak limitation : 4(II)
Remark : H, Y
Version : 29.03.2019
Limit value type (country of origin) : STEL (EC)
Limit value : 100 ppm / 384 mg/m³
Remark : Skin
Version : 20.06.2019
Limit value type (country of origin) : TWA (EC)
Limit value : 50 ppm / 192 mg/m³
Remark : Skin
Version : 20.06.2019

Biological limit values

ALUMINIUM POWDER (STABILIZED) ; CAS No. : 7429-90-5

Limit value type (country of origin) : TRGS 903 (D)
Parameter : Aluminium / Urine (U) / At long term exposure: after several previous shifts
Limit value : 50 µg/g Kr
Version : 29.03.2019

ETHYLBENZENE ; CAS No. : 100-41-4

Limit value type (country of origin) : TRGS 903 (D)
Parameter : Mandelic acid + Phenylglyoxyl acid / Urine (U) / End of exposure or end of shift
Limit value : 250 mg/g Kr
Version : 29.03.2019

PROPAN-2-OL ; CAS No. : 67-63-0

Limit value type (country of origin) : TRGS 903 (D)
Parameter : Acetone / Whole blood (B) / End of exposure or end of shift
Limit value : 25 mg/l
Version : 29.03.2019

Limit value type (country of origin) : TRGS 903 (D)
Parameter : Acetone / Urine (U) / End of exposure or end of shift
Limit value : 25 mg/l
Version : 29.03.2019

TOLUENE ; CAS No. : 108-88-3

Limit value type (country of origin) : TRGS 903 (D)
Parameter : Toluene / Whole blood (B) / after end of exposure (h): 0
Limit value : 600 µg/l
Version : 29.03.2019

Limit value type (country of origin) : TRGS 903 (D)
Parameter : Toluene / Urine (U) / End of exposure or end of shift ; At long term exposure: after several previous shifts
Limit value : 75 µg/l
Version : 29.03.2019

Limit value type (country of origin) : TRGS 903 (D)
Parameter : o-Cresol / Urine (U) / End of exposure or end of shift ; At long term exposure: after several previous shifts
Limit value : 1,5 mg/l
Version : 29.03.2019

DNEL-/PNEC-values

DNEL/DMEL

Limit value type : DNEL worker (systemic) (NAPHTA (PETROLEUM), LIGHT AROMATIC ; CAS No. : 64742-95-6)
Exposure route : Dermal
Exposure frequency : Long-term
Limit value : 25 mg/kg
Limit value type : DNEL worker (systemic) (NAPHTA (PETROLEUM), LIGHT AROMATIC ; CAS No. :

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64742-95-6)
Exposure route : Inhalation
Exposure frequency : Long-term
Limit value : 150 mg/m³
Limit value type : DNEL worker (local) (ALUMINIUM POWDER (STABILIZED) ; CAS No. : 7429-90-5)
Exposure route : Inhalation
Exposure frequency : Long-term
Limit value : 3,72 mg/m³
Limit value type : DNEL worker (local) (XYLENE ; CAS No. : 1330-20-7)
Exposure route : Inhalation
Exposure frequency : Short-term
Limit value : 289 mg/m³
Limit value type : DNEL worker (local) (2-BUTANONE OXIME ; CAS No. : 96-29-7)
Exposure route : Inhalation
Exposure frequency : Long-term
Limit value : 3,33 mg/m³
Limit value type : DNEL worker (systemic) (2-BUTANONE OXIME ; CAS No. : 96-29-7)
Exposure route : Inhalation
Exposure frequency : Long-term
Limit value : 9 mg/m³
Limit value type : DNEL worker (systemic) (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route : Inhalation
Exposure frequency : Long-term
Limit value : 500 mg/m³
Limit value type : DNEL worker (systemic) (XYLENE ; CAS No. : 1330-20-7)
Exposure route : Inhalation
Exposure frequency : Long-term
Limit value : 77 mg/m³
Limit value type : DNEL worker (systemic) (ZINC POWDER - ZINC DUST (STABILIZED) ; CAS No. : 7440-66-6)
Exposure route : Inhalation
Exposure frequency : Long-term
Limit value : 5 mg/m³
Limit value type : DNEL worker (systemic) (ZINC POWDER - ZINC DUST (STABILIZED) ; CAS No. : 7440-66-6)
Exposure route : Dermal
Exposure frequency : Long-term
Limit value : 83 mg/kg
Limit value type : DNEL worker (systemic) (XYLENE ; CAS No. : 1330-20-7)
Exposure route : Inhalation
Exposure frequency : Short-term
Limit value : 289 mg/m³
Limit value type : DNEL worker (systemic) (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route : Dermal
Exposure frequency : Long-term
Limit value : 888 mg/kg
Limit value type : DNEL worker (systemic) (XYLENE ; CAS No. : 1330-20-7)
Exposure route : Dermal
Exposure frequency : Long-term
Limit value : 180 mg/kg

8.2 Exposure controls

Personal protection equipment

Eye/face protection

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Wear suitable safety goggles in case of splash.

Suitable eye protection
EN 166.

Skin protection

Hand protection



Suitable gloves type : EN 374.

Suitable material : Butyl caoutchouc (butyl rubber)

Breakthrough time (maximum wearing time) : 480 min.

Thickness of the glove material : 0.3 mm.

Remark : The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Respiratory protection



Respiratory protection necessary at: exceeding exposure limit values

Suitable respiratory protection apparatus

Combination filtering device (EN 14387)

Type : A

Remark

Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

General information

Do not put any product-impregnated cleaning rags into your trouser pockets. When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing immediately.

8.3 Additional information

No tests have been performed. Selection made for preparations according to the best available knowledge and information on ingredients. In the case of preparations the resistance of glove materials cannot be calculated in advance so it has to be tested before use.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid

Colour : silver

Odour

characteristic

Safety characteristics

Initial boiling point and boiling range (1013 hPa) approx. 140 - 180 °C

Flash point : approx. 32 °C

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Auto-ignition temperature :	>	465	°C
Lower explosion limit :		1	Vol-%
Upper explosion limit :		7	Vol-%
Vapour pressure :	(50 °C)	No data available	
Density :	(20 °C)	approx.	1,09 g/cm ³
Solvent separation test :	(20 °C)	No data available	
Viscosity :	(20 °C)	approx.	280 mPa*s
Maximum VOC content (EC) :		49	Wt %
Maximum VOC content (Switzerland) :		49	Wt %

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

Violent reaction with: Oxidising agent, strong. Formation of: Peroxides.

10.2 Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

Does not decompose when used for intended uses.
Decomposition products in case of fire: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity

Parameter :	ATEmix calculated
Exposure route :	Oral
Effective dose :	> 2000 mg/kg
Parameter :	LD50 (ALUMINIUM POWDER (STABILIZED) ; CAS No. : 7429-90-5)
Exposure route :	Oral
Species :	Rat
Effective dose :	> 15900 mg/kg
Method :	OECD 401
Parameter :	LD50 (ZINC POWDER - ZINC DUST (STABILIZED) ; CAS No. : 7440-66-6)
Exposure route :	Oral
Species :	Rat
Effective dose :	> 2000 mg/kg
Method :	OECD 401
Parameter :	LD50 (2-BUTANONE OXIME ; CAS No. : 96-29-7)
Exposure route :	Oral
Species :	Rat
Effective dose :	> 900 mg/kg
Parameter :	LD50 (NAPHTHA (PETROLEUM), HYDROTREATED HEAVY ; CAS No. : 64742-48-9)

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Exposure route : Oral
Species : Rat
Effective dose : > 5000 mg/kg
Method : OECD 401
Parameter : LD50 (NAPHTHA (PETROLEUM), LIGHT AROMATIC ; CAS No. : 64742-95-6)
Exposure route : Oral
Species : Rat
Effective dose : > 2000 mg/kg
Method : OECD 401
Parameter : LD50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route : Oral
Species : Rat
Effective dose : > 2000 mg/kg
Method : OECD 401
Parameter : LD50 (XYLENE ; CAS No. : 1330-20-7)
Exposure route : Oral
Species : Rat
Effective dose : 4300 mg/kg

Acute dermal toxicity
Parameter : ATEmix calculated
Exposure route : Dermal
Effective dose : > 2000 mg/kg
Parameter : LD50 (2-BUTANONE OXIME ; CAS No. : 96-29-7)
Exposure route : Dermal
Species : Rabbit
Effective dose : > 1000 mg/kg
Method : OECD 402
Parameter : LD50 (NAPHTHA (PETROLEUM), HYDROTREATED HEAVY ; CAS No. : 64742-48-9)
Exposure route : Dermal
Species : Rabbit
Effective dose : > 2000 mg/kg
Method : OECD 402
Parameter : LD50 (NAPHTHA (PETROLEUM), LIGHT AROMATIC ; CAS No. : 64742-95-6)
Exposure route : Dermal
Species : Rabbit
Effective dose : > 2000 mg/kg
Method : OECD 402
Parameter : LD50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route : Dermal
Species : Rabbit
Effective dose : > 2000 mg/kg
Parameter : LD50 (XYLENE ; CAS No. : 1330-20-7)
Exposure route : Dermal
Species : Rabbit
Effective dose : 4200 mg/kg

Acute inhalation toxicity
Parameter : ATEmix calculated
Exposure route : Inhalation
Effective dose : > 20 mg/m³
Parameter : LC50 (2-BUTANONE OXIME ; CAS No. : 96-29-7)
Exposure route : Inhalation
Species : Rat
Effective dose : > 4,83 mg/l
Exposure time : 4 h
Method : OECD 403

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Parameter : LC50 (NAPHTHA (PETROLEUM), HYDROTREATED HEAVY ; CAS No. : 64742-48-9)
Exposure route : Inhalation
Species : Rat
Effective dose : > 5610 - 7630 mg/m³
Method : OECD 403
Parameter : LC50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route : Inhalation
Species : Rat
Effective dose : > 10000 ppm
Exposure time : 6 h
Method : OECD 403
Parameter : LC50 (NAPHTHA (PETROLEUM), LIGHT AROMATIC ; CAS No. : 64742-95-6)
Exposure route : Inhalation
Species : Rat
Effective dose : > 5000 mg/l
Method : OECD 403
Parameter : LC50 (ALUMINIUM POWDER (STABILIZED) ; CAS No. : 7429-90-5)
Exposure route : Inhalation
Species : Rat
Effective dose : 7,6 mg/l
Exposure time : 1 h
Method : OECD 403
Parameter : LC50 (ZINC POWDER - ZINC DUST (STABILIZED) ; CAS No. : 7440-66-6)
Exposure route : Inhalation
Species : Rat
Effective dose : > 5410 mg/m³
Method : OECD 403
Parameter : LC50 (XYLENE ; CAS No. : 1330-20-7)
Exposure route : Inhalation
Species : Rat
Effective dose : 6350 mg/l
Exposure time : 4 h

Corrosion

Skin corrosion/irritation

No further relevant information available.

Serious eye damage/eye irritation

No further relevant information available.

Respiratory or skin sensitisation

Skin sensitisation

Parameter : Skin sensitisation (2-BUTANONE OXIME ; CAS No. : 96-29-7)
Species : Guinea pig
Result : Sensitising.
Method : OECD 406

No further relevant information available.

Sensitisation to the respiratory tract

No further relevant information available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

No further relevant information available.

Germ cell mutagenicity

No further relevant information available.

Reproductive toxicity

No further relevant information available.

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STOT-single exposure

No further relevant information available.

STOT-repeated exposure

No further relevant information available.

Aspiration hazard

No further relevant information available.

11.2 Toxicokinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

11.3 Other adverse effects

May be absorbed through the skin. Frequently or prolonged contact with skin may cause dermal irritation.

11.4 Additional information

Preparation not tested. The statement is derived from the properties of the single components.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

Parameter :	LC50 (ZINC POWDER - ZINC DUST (STABILIZED) ; CAS No. : 7440-66-6)
Species :	Pimephales promelas (fathead minnow)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	330 - 780 µg/l
Exposure time :	96 h
Parameter :	LC50 (XYLENE ; CAS No. : 1330-20-7)
Species :	Oncorhynchus mykiss (Rainbow trout)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	7,6 mg/l
Exposure time :	96 h
Method :	OECD 203
Parameter :	LC50 (2-BUTANONE OXIME ; CAS No. : 96-29-7)
Species :	Fish
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	> 100 mg/l
Exposure time :	96 h
Evaluation :	Harmless to fish up to the concentration tested.
Method :	OECD 203
Parameter :	LC50 (NAPHTHA (PETROLEUM), HYDROTREATED HEAVY ; CAS No. : 64742-48-9)
Species :	Fish
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	5,4 mg/l
Exposure time :	48 h
Method :	OECD 203
Parameter :	LC50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Species :	Pimephales promelas (fathead minnow)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	10000 mg/l
Exposure time :	96 h
Method :	OECD 203
Parameter :	LC50 (NAPHTHA (PETROLEUM), LIGHT AROMATIC ; CAS No. : 64742-95-6)
Species :	Oncorhynchus mykiss (Rainbow trout)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	9,2 mg/l

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Exposure time : 96 h
Parameter : LC50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Species : Daphnia magna (Big water flea)
Evaluation parameter : Acute (short-term) daphnia toxicity
Effective dose : > 10000 mg/l
Method : OECD 202

Chronic (long-term) fish toxicity

Parameter : NOEC (ALUMINIUM POWDER (STABILIZED) ; CAS No. : 7429-90-5)
Species : Leuciscus idus (golden orfe)
Evaluation parameter : Acute (short-term) fish toxicity
Effective dose : > 50 mg/l
Exposure time : 96 h
Parameter : NOEC (ALUMINIUM POWDER (STABILIZED) ; CAS No. : 7429-90-5)
Species : Fish
Evaluation parameter : Chronic (long-term) fish toxicity
Effective dose : 0,169 mg/l
Exposure time : 60 D

Toxicity to microorganisms

Parameter : EC50 (ZINC POWDER - ZINC DUST (STABILIZED) ; CAS No. : 7440-66-6)
Species : Bacteria toxicity
Effective dose : 5,2 mg/l
Exposure time : 3 h
Parameter : EC50 (XYLENE ; CAS No. : 1330-20-7)
Species : Bacteria toxicity
Effective dose : > 175 mg/l
Parameter : EC50 (NAPHTHA (PETROLEUM), HYDROTREATED HEAVY ; CAS No. : 64742-48-9)
Species : Bacteria toxicity
Effective dose : 15,41 mg/l
Exposure time : 40 h
Parameter : EC50 (NAPHTHA (PETROLEUM), LIGHT AROMATIC ; CAS No. : 64742-95-6)
Species : Bacteria toxicity
Effective dose : 15,41 mg/l
Exposure time : 40 h

12.2 Persistence and degradability

Biodegradation

Parameter : Biodegradation (NAPHTHA (PETROLEUM), LIGHT AROMATIC ; CAS No. : 64742-95-6)
Inoculum : Biodegradation
Degradation rate : 78 %
Test duration : 28 D
Parameter : Biodegradation (NAPHTHA (PETROLEUM), HYDROTREATED HEAVY ; CAS No. : 64742-48-9)
Inoculum : Biodegradation
Degradation rate : 77 %
Test duration : 28 D
Evaluation : Readily biodegradable (according to OECD criteria).
Method : OECD 301F
Parameter : Biodegradation (ETHYLBENZENE ; CAS No. : 100-41-4)
Inoculum : Biodegradation
Evaluation parameter : Aerobic
Degradation rate : 70 - 80 %
Test duration : 28 D
Evaluation : Readily biodegradable (according to OECD criteria).
Parameter : Biodegradation (PROPAN-2-OL ; CAS No. : 67-63-0)
Inoculum : Biodegradation
Evaluation parameter : Aerobic

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Degradation rate : 53 %
Test duration : 5 D
Parameter : DOC reduction (2-BUTANONE OXIME ; CAS No. : 96-29-7)
Inoculum : Biodegradation
Evaluation parameter : Aerobic
Degradation rate : approx. 70 %
Test duration : 18 D
Method : OECD 302B

12.3 Bioaccumulative potential

No indication of bioaccumulation potential.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6 Other adverse effects

No information available.

12.7 Additional ecotoxicological information

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. List of proposed waste codes/waste designations in accordance with EWC

13.1 Waste treatment methods

Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

08 01 11 - Abfälle aus HZVA von Beschichtungen (Farben, Lacke, Email), Klebstoffen, Dichtmassen und Druckfarben. (Farb- und Lackabfälle, die organische Lösemittel oder andere gefährliche Stoffe enthalten.)

Waste code packaging

15 01 04 - metallic packaging.

13.2 Additional information

These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use.

SECTION 14: Transport information

14.1 UN number

UN 1263

14.2 UN proper shipping name

Land transport (ADR/RID)

PAINT (NAPHTA (PETROLEUM), LIGHT AROMATIC · ZINC POWDER)

Sea transport (IMDG)

PAINT (NAPHTA (PETROLEUM), LIGHT AROMATIC · ZINC POWDER)

Air transport (ICAO-TI / IATA-DGR)

PAINT (NAPHTA (PETROLEUM), LIGHT AROMATIC · ZINC POWDER)

14.3 Transport hazard class(es)

Land transport (ADR/RID)

Class(es) : 3
Classification code : F1
Hazard identification number (Kemler No.) : 30

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Tunnel restriction code : D/E
Special provisions : LQ 5 I - E 1
Hazard label(s) :



Sea transport (IMDG)
Class(es) : 3
EmS-No. : F-E / S-E
Special provisions : LQ 5 I - E 1
Hazard label(s) :



Air transport (ICAO-TI / IATA-DGR)
Class(es) : 3
Special provisions : E 1
Hazard label(s) :



14.4 Packing group

III

14.5 Environmental hazards

Land transport (ADR/RID) : Yes
Sea transport (IMDG) : Yes (P)
Air transport (ICAO-TI / IATA-DGR) : Yes

14.6 Special precautions for user

None

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

No transport as bulk according to IBC Code.

SECTION 15: Regulatory information

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

EU legislation

Authorisations and/or restrictions on use

Restrictions on use

Use restriction according to REACH annex XVII, no. : 3, 28, 30, 40, 48

Restrictions of occupation

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Other regulations (EU)

Labelling for contents according to regulation (EC) No. 648/2004

< 5 % aliphatic hydrocarbons
> 30 % aromatic hydrocarbons

National regulations

Restrictions of occupation

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Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Technische Anleitung Luft (TA-Luft)

Weight fraction (Number 5.2.5. I) : < 5 %

Water hazard class (WGK)

Classification according to AwSV - Class : 2 (Obviously hazardous to water)

15.2 Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1 Indication of changes

14. UN proper shipping name

16.2 Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (Europäisches Übereinkommen über die Beförderung gefährlicher Güter auf der Straße)

AOX: adsorbierbare organisch gebundene Halogene

AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen

CAS: Chemical Abstracts Service (Unterabteilung der American Chemical Society)

CLP: Verordnung (EG) Nr. 1272/2008 über die Einstufung, Kennzeichnung und Verpackung von Stoffen und Gemischen (Classification Labelling and Packaging)

EAK / AVV: europäischer Abfallartenkatalog / Abfallverzeichnis-Verordnung

ECHA: Europäische Chemikalienagentur (European Chemicals Agency)

EINECS: : Altstoffverzeichnis (European Inventory of Existing Commercial Chemical Substances)

GHS: Global harmonisiertes System zur Einstufung und Kennzeichnung von Chemikalien (Globally Harmonized System of Classification and Labelling of Chemicals)

IATA: Internationale Luftverkehrs-Vereinigung (International Air Transport Association)

ICAO: Internationale Zivilluftfahrtorganisation (International Civil Aviation Organization)

IMDG: Gefahrgutkennzeichnung für gefährliche Güter im Seeschiffverkehr (International Maritime Code for Dangerous Goods)

RID: Regelung zur internationalen Beförderung gefährlicher Güter im Schienenverkehr (Règlement concernant le transport international ferroviaire de marchandises dangereuses)

TRGS: Technische Regel für den Umgang mit Gefahrstoffen

VbF: Verordnung über brennbare Flüssigkeiten

VOC: flüchtige organische Verbindung (volatile organic compound)

VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe

WGK: Wassergefährdungsklasse

16.3 Key literature references and sources for data

DGUV: GESTIS-Stoffdatenbank

ECHA: Classification And Labelling Inventory

ECHA: Pre-registered Substances

ECHA: Registered Substances

EC_Safety Data Sheet of Suppliers

ESIS: European Chemical Substances Information System

GDL: Gefahrstoffdatenbank der Länder

UBA Rigoletto: Wassergefährdende Stoffe

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council

Regulation (EC) No. 1272/2008 of the European Parliament and of the Council

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

No information available.

16.5 Relevant H- and EUH-phrases (Number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H228	Flammable solid.

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H261	In contact with water releases flammable gases.
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.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H361d	Suspected of damaging the unborn child.
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.

16.6 Training advice

None

16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.
