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

1.1 Product identifier

Zinc Paste Silver
UFI: 2J40-00C8-K00H-W705

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

Relevant identified uses

Sectors of use [SU]
Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Industrial uses
Products Category [PC]
PC-PNT-3 - Paints/coatings – Protective and functional

1.3 Details of the supplier of the safety data sheet

Supplier

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
(Monday to Thursday from 8 am to 4 pm and Friday from 8 am to 3 pm)

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.
Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2 ; Causes serious eye irritation.
STOT SE 3 ; H336 - STOT-single exposure : Category 3 ; May cause drowsiness or dizziness.
STOT RE 2 ; H373 - STOT-repeated exposure : Category 2 ; May cause damage to organs through prolonged or repeated exposure.
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
XYLENE ; CAS No. : 1330-20-7

Hazard statements

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

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

EUH066	Repeated exposure may cause skin dryness or cracking.

Special rules for supplemental label elements for certain mixtures

EUH208	Contains COBALT BIS(2-ETHYLHEXANOATE).May produce an allergic reaction.

2.3 Other hazards
None

SECTION 3: Composition/information on ingredients

3.2 Mixtures
Hazardous ingredients

SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC ; REACH No. : 01-2119455851-35-XXXX ; EC No. : 918-668-5; CAS No. : 64742-95-6
Weight fraction : ≥ 20 - < 25 %
Classification 1272/2008 [CLP] : Flam. Liq. 3 ; H226 Asp. Tox. 1 ; H304 STOT SE 3 ; H335 STOT SE 3 ; H336 Aquatic Chronic 2 ; H411 EUH066

XYLENE ; REACH No. : 01-2119488216-32-XXXX ; EC No. : 215-535-7; CAS No. : 1330-20-7
Weight fraction : ≥ 10 - < 20 %
Classification 1272/2008 [CLP] : Flam. Liq. 3 ; H226 Asp. Tox. 1 ; H304 STOT RE 2 ; H373 Acute Tox. 4 ; H312 Acute Tox. 4 ; H332 Skin Irrit. 2 ; H315 Eye Irrit. 2 ; H319 STOT SE 3 ; H335

ZINC POWDER - ZINC DUST (STABILIZED) ; REACH No. : 01-2119467174-37-XXXX ; EC No. : 231-175-3; CAS No. : 7440-66-6
Weight fraction : ≥ 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 : ≥ 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 : ≥ 5 - < 10 %
Classification 1272/2008 [CLP] : Asp. Tox. 1 ; H304

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

Weight fraction : ≥ 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

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

COBALT BIS(2-ETHYLHEXANOATE) ; REACH No. : 01-2119524678-29-XXXX ; EC No. : 205-250-6; CAS No. : 136-52-7
Weight fraction : ≥ 0,01 - < 0,1 %
Classification 1272/2008 [CLP] : Repr. 1B ; H360 Skin Sens. 1A ; H317 Eye Irrit. 2 ; H319 Aquatic Acute 1 ; H400 Aquatic Chronic 3 ; H412

Additional information
For full text of Hazard- and EU Hazard-statements: 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.

Following 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.

Hazardous combustion products
In case of fire may be liberated: Carbon monoxide , Carbon dioxide (CO2)

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. Provide adequate ventilation.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Collect in closed 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. Provide adequate ventilation as well as local exhaustion at critical locations.

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) : 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

XYLENE ; CAS No. : 1330-20-7

Limit value type (country of origin) :	TRGS 900 (D)
Limit value :	50 ppm / 220 mg/m³
Peak limitation :	2(II)
Remark :	H
Version :	23.06.2022
Limit value type (country of origin) :	STEL (EC)
Limit value :	100 ppm / 442 mg/m³
Remark :	Skin
Version :	20.06.2019
Limit value type (country of origin) :	TWA (EC)
Limit value :	50 ppm / 221 mg/m³
Remark :	Skin
Version :	20.06.2019

ZINC POWDER - ZINC DUST (STABILIZED) ; CAS No. : 7440-66-6

Limit value type (country of origin) :	STEL (D)
Parameter :	E: inhalable fraction
Limit value :	4 mg/m³
Remark :	15 minutes average
Version :	
Limit value type (country of origin) :	STEL (D)
Parameter :	A: respirable fraction
Limit value :	0,4 mg/m³
Remark :	15 minutes average
Version :	
Limit value type (country of origin) :	TWA (D)
Parameter :	E: inhalable fraction
Limit value :	2 mg/m³
Remark :	DFG
Version :	
Limit value type (country of origin) :	TWA (D)
Parameter :	A: respirable fraction
Limit value :	0,1 mg/m³
Remark :	DFG
Version :	

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

Limit value type (country of origin) :	TWA (D)
Parameter :	E: inhalable fraction
Limit value :	4 mg/m³
Remark :	DFG
Version :	
Limit value type (country of origin) :	TWA (D)
Parameter :	A: respirable fraction
Limit value :	1,5 mg/m³
Remark :	DFG
Version :	

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 :	23.06.2022
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

TOLUENE ; CAS No. : 108-88-3

Limit value type (country of origin) :	TRGS 900 (D)
Limit value :	50 ppm / 190 mg/m³
Peak limitation :	2(II)
Remark :	H, Y
Version :	23.06.2022
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

XYLENE ; CAS No. : 1330-20-7

Limit value type (country of origin) :	TRGS 903 (D)
Parameter :	Methylhippuric (toluric) acid (all isomers) / Urine (U) / End of exposure or end of shift
Limit value :	2000 mg/l
Version :	25.02.2022

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 Creatinine
Version :	25.02.2022

ETHYLBENZENE ; CAS No. : 100-41-4

Limit value type (country of origin) :	TRGS 903 (D)
Parameter :	Mandelic acid plus phenylglyoxylic acid / Urine (U) / End of exposure or end of shift
Limit value :	250 mg/g Creatinine
Version :	25.02.2022

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 :	25.02.2022
Limit value type (country of origin) :	TRGS 903 (D)
Parameter :	Toluene / Urine (U) / End of exposure or end of shift
Limit value :	75 µg/l
Version :	25.02.2022
Limit value type (country of origin) :	TRGS 903 (D)
Parameter :	O-cresol (after hydrolysis) / Urine (U) / End of exposure or end of shift ; At long term exposure: after several previous shifts
Limit value :	1,5 mg/l
Version :	25.02.2022

DNEL-/PNEC-values

DNEL/DMEL

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

Limit value type :	DNEL worker (systemic)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	25 mg/kg
Limit value type :	DNEL worker (systemic)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	150 mg/m³

XYLENE ; CAS No. : 1330-20-7

Limit value type :	DNEL Consumer (local)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	65,3 mg/m³
Limit value type :	DNEL Consumer (local)
Exposure route :	Inhalation

Exposure frequency : Short-term
Limit value : 260 mg/m³
Limit value type : DNEL Consumer (systemic)
Exposure route : Inhalation
Exposure frequency : Long-term
Limit value : 65,3 mg/m³
Limit value type : DNEL Consumer (systemic)
Exposure route : Inhalation
Exposure frequency : Short-term
Limit value : 260 mg/m³
Limit value type : DNEL Consumer (systemic)
Exposure route : Dermal
Exposure frequency : Long-term
Limit value : 125 mg/kg bw/day
Limit value type : DNEL Consumer (systemic)
Exposure route : Oral
Exposure frequency : Long-term
Limit value : 5 mg/kg bw/day
Limit value type : DNEL worker (local)
Exposure route : Inhalation
Exposure frequency : Short-term
Limit value : 442 mg/m³

ALUMINIUM POWDER (STABILIZED) ; CAS No. : 7429-90-5
Limit value type : DNEL worker (local)
Exposure route : Inhalation
Exposure frequency : Long-term
Limit value : 3,72 mg/m³

XYLENE ; CAS No. : 1330-20-7
Limit value type : DNEL worker (local)
Exposure route : Inhalation
Exposure frequency : Long-term
Limit value : 221 mg/m³
Limit value type : DNEL worker (systemic)
Exposure route : Inhalation
Exposure frequency : Long-term
Limit value : 221 mg/m³

ZINC POWDER - ZINC DUST (STABILIZED) ; CAS No. : 7440-66-6
Limit value type : DNEL worker (systemic)
Exposure route : Inhalation
Exposure frequency : Long-term
Limit value : 5 mg/m³
Limit value type : DNEL worker (systemic)
Exposure route : Dermal
Exposure frequency : Long-term
Limit value : 83 mg/kg

XYLENE ; CAS No. : 1330-20-7
Limit value type : DNEL worker (systemic)
Exposure route : Inhalation
Exposure frequency : Short-term
Limit value : 442 mg/m³
Limit value type : DNEL worker (systemic)
Exposure route : Dermal
Exposure frequency : Long-term
Limit value : 212 mg/kg bw/day

PNEC

XYLENE ; CAS No. : 1330-20-7

Limit value type :	PNEC (Aquatic, freshwater)
Limit value :	0,044 - 0,327 mg/l
Limit value type :	PNEC (Aquatic, intermittent release)
Limit value :	0,01 - 0,327 mg/l
Limit value type :	PNEC (Aquatic, marine water)
Limit value :	0,0044 - 0,327 mg/l
Limit value type :	PNEC (Sediment, freshwater)
Limit value :	2,52 - 12,46 mg/kg dw
Limit value type :	PNEC (Sediment, marine water)
Limit value :	0,252 - 12,46 mg/kg dw
Limit value type :	PNEC (Soil)
Limit value :	0,852 - 2,31 mg/kg dw
Limit value type :	PNEC (Sewage treatment plant)
Limit value :	1,6 - 6,58 mg/l

TOLUENE ; CAS No. : 108-88-3

Limit value type :	PNEC (Aquatic, freshwater)
Limit value :	0,074 - 0,68 mg/l
Limit value type :	PNEC (Aquatic, intermittent release)
Limit value :	0,00387 mg/l
Limit value type :	PNEC (Aquatic, marine water)
Limit value :	0,0074 - 0,68 mg/l
Limit value type :	PNEC (Sediment, freshwater)
Limit value :	1,78 - 16,39 mg/kg dw
Limit value type :	PNEC (Sediment, marine water)
Limit value :	0,178 - 16,39 mg/kg dw
Limit value type :	PNEC (Soil)
Limit value :	0,313 - 2,89 mg/kg dw
Limit value type :	PNEC (Sewage treatment plant)
Limit value :	0,84 - 13,61 mg/l

8.2 Exposure controls

Personal protection equipment

Eye/face protection

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 : 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
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. Do not put any product-impregnated cleaning rags into your trouser pockets.

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

like: Hydrocarbons, aromatic.

Safety characteristics

Melting point/freezing point :	(1013 hPa)		not determined		
Initial boiling point and boiling range :	(1013 hPa)	approx.	140 - 180	°C	
Flash point :		approx.	32	°C	DIN EN ISO 13736
Auto-ignition temperature :	(NAPHTHA)	>	400	°C	Literature value
Flammability :			flammable		
Lower explosion limit :	(NAPHTHA)		0,6	Vol-%	Literature value
Upper explosion limit :	(NAPHTHA)		7	Vol-%	Literature value
Vapour pressure :	(50 °C)		not determined		
Density :	(20 °C)	approx.	1,106	g/cm^3	
Relative density :	(20 °C)		not determined		
Solvent separation test :	(20 °C)		No data available		
Water solubility :	(20 °C)		practically insoluble		
Cinematic viscosity :	(20 °C)	approx.	400	mm^2/s	
Maximum VOC content (EC) :			52	Weight-%	
Maximum VOC content (Switzerland) :			52	Weight-%	
Taxable VOC content (Switzerland) :			51,5	Weight-%	

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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Acute oral toxicity

Parameter :	ATEmix
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 (NAPHTHA (PETROLEUM), HYDROTREATED HEAVY ; CAS No. : 64742-48-9)
Exposure route :	Oral
Species :	Rat
Effective dose :	> 5000 mg/kg
Method :	OECD 401
Parameter :	LD50 (SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC ; CAS No. : 64742-95-6)
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
Exposure route :	Dermal
Effective dose :	> 2000 mg/kg
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 (SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC ; CAS No. : 64742-95-6)
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	> 2000 mg/kg
Method :	OECD 402
Parameter :	LD50 (XYLENE ; CAS No. : 1330-20-7)
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	4200 mg/kg

Acute inhalation toxicity

Parameter :	ATEmix
Exposure route :	Inhalation
Effective dose :	> 20 mg/m^3
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/m^3
Method :	OECD 403
Parameter :	LC50 (NAPHTHA (PETROLEUM), HYDROTREATED HEAVY ; CAS No. : 64742-48-9)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	> 5610 - 7630 mg/m^3
Method :	OECD 403
Parameter :	LC50 (SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC ; CAS No. : 64742-95-6)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	> 5000 mg/l
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

Causes skin irritation.

Serious eye damage/eye irritation

No further relevant information available.

Respiratory or skin sensitisation

Skin sensitisation

Parameter :	Skin sensitisation (COBALT BIS(2-ETHYLHEXANOATE) ; CAS No. : 136-52-7)
Species :	Mouse
Result :	Strong sensitiser (Subcategory 1A).

Method : OECD 429

No further relevant information available.

Assessment/classification

Mixture related information (calculated) : May produce an allergic reaction.

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

Adverse effects on sexual function and fertility

Parameter : NOAEL(C) (COBALT BIS(2-ETHYLHEXANOATE) ; CAS No. : 136-52-7)
Exposure route : Oral
Species : Rat
Effective dose : 30 mg/kg bw/day
Result : Positive.
Method : OECD 422

Adverse effects on developmental toxicity

Parameter : Two generation reproduction toxicity test (TOLUENE ; CAS No. : 108-88-3)
Exposure route : NOAEL(C)
Species : Rat
Effective dose : 500 ppm
Exposure time : 6 h/d
Method : OECD 416

Assessment/classification

Mixture related information (calculated) : Based on available data, the classification criteria are not met.

STOT-single exposure

May cause drowsiness or dizziness.

STOT-repeated exposure

No further relevant information available.

STOT RE 1 and 2

Parameter : STOT RE 1 and 2 (XYLENE ; CAS No. : 1330-20-7)
Exposure route : Oral
Species : Rat
Effective dose : 150 mg/kg bw/day
Exposure time : 90 day(s)

Parameter : STOT RE 1 and 2 (XYLENE ; CAS No. : 1330-20-7)
Exposure route : Inhalative
Species : Rat
Effective dose : >= 3,5 mg/l
Exposure time : 90 day(s)

Parameter : STOT RE 1 and 2 (TOLUENE ; CAS No. : 108-88-3)
Exposure route : Oral
Species : Rat
Effective dose : 625 mg/kg
Exposure time : 90 day(s)

Parameter : STOT RE 1 and 2 (TOLUENE ; CAS No. : 108-88-3)
Exposure route : Inhalative
Species : Rat
Effective dose : 1250 ppm
Exposure time : 90 day(s)

Method : Regulation (EC) No. 440/2008, Annex, B.29

Assessment/classification

Mixture related information (calculated) : May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

May be fatal if swallowed and enters airways.

11.2 Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Toxicokinetics, metabolism and distribution

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

Other adverse effects

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

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 (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 (SOLVENT 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
Exposure time :	96 h

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

Acute (short-term) toxicity to crustacea

Parameter : EC50 (SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC ; CAS No. : 64742-95-6)
Species : Daphnia magna (Big water flea)
Evaluation parameter : Acute (short-term) toxicity to crustacea
Effective dose : 3,2 mg/l
Exposure time : 48 h
Method : OECD 202

Chronic (long-term) toxicity to aquatic invertebrate

Parameter : NOEC (ALUMINIUM POWDER (STABILIZED) ; CAS No. : 7429-90-5)
Species : Daphnia magna (Big water flea)
Evaluation parameter : Acute (short-term) daphnia toxicity
Effective dose : > 0,135 mg/l
Exposure time : 48 h
Method : OECD 202

Parameter : NOEC (ZINC POWDER - ZINC DUST (STABILIZED) ; CAS No. : 7440-66-6)
Species : Oncorhynchus mykiss (Rainbow trout)
Evaluation parameter : Chronic (long-term) fish toxicity
Effective dose : 39 µg/l
Exposure time : 30 D
Method : OECD 215

Parameter : NOEC (ZINC POWDER - ZINC DUST (STABILIZED) ; CAS No. : 7440-66-6)
Species : Daphnia magna (Big water flea)
Evaluation parameter : Chronic (long-term) daphnia toxicity
Effective dose : 73 - 251 µg/l
Exposure time : 21 D
Method : OECD 211

Parameter : NOEC (ALUMINIUM POWDER (STABILIZED) ; CAS No. : 7429-90-5)
Species : Daphnia magna (Big water flea)
Evaluation parameter : Chronic (long-term) daphnia toxicity
Effective dose : 0,076 - 0,137
Exposure time : 21 D

Parameter : NOEC (ZINC POWDER - ZINC DUST (STABILIZED) ; CAS No. : 7440-66-6)
Species : Pseudokirchneriella subcapitata
Evaluation parameter : Acute (short-term) algae toxicity
Effective dose : 50 µg/l
Exposure time : 3 D
Method : OECD 201

Acute (short-term) toxicity to algae and cyanobacteria

Parameter : EC50 (ZINC POWDER - ZINC DUST (STABILIZED) ; CAS No. : 7440-66-6)
Species : Daphnia magna (Big water flea)
Evaluation parameter : Acute (short-term) daphnia toxicity
Effective dose : 1833 - 2909 µg/l
Exposure time : 48 h
Method : OECD 202

Parameter : EC50 (XYLENE ; CAS No. : 1330-20-7)
Species : Daphnia magna (Big water flea)
Evaluation parameter : Acute (short-term) daphnia toxicity
Effective dose : 3,82 mg/l
Exposure time : 48 h

Parameter : EC50 (XYLENE ; CAS No. : 1330-20-7)
Species : Pseudokirchneriella subcapitata
Evaluation parameter : Acute (short-term) algae toxicity

Effective dose :	4,7 mg/l
Exposure time :	72 h
Method :	OECD 201
Parameter :	EL50 (SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC ; CAS No. : 64742-95-6)
Species :	Pseudokirchneriella subcapitata
Evaluation parameter :	Acute (short-term) toxicity to algae and cyanobacteria
Effective dose :	2,6 mg/l
Exposure time :	72 h
Method :	OECD 201

Toxicity to other aquatic plants/organisms

Parameter :	EC50 (COBALT BIS(2-ETHYLHEXANOATE) ; CAS No. : 136-52-7)
Species :	Lemna minor (little duckweed)
Evaluation parameter :	Toxicity to other aquatic plants/organisms
Effective dose :	90,1 µg/l
Exposure time :	7 D
Method :	OECD 221

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 (SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC ; CAS No. : 64742-95-6)
Species :	Bacteria toxicity
Effective dose :	> 99 mg/l
Exposure time :	10 min
Method :	OECD 209

12.2 Persistence and degradability

Biodegradation

Parameter :	BOD (% of ThOD) (SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC ; CAS No. : 64742-95-6)
Inoculum :	Biodegradation
Degradation rate :	78 %
Test duration :	28 D
Method :	OECD 301F
Parameter :	BOD (% of COD) (XYLENE ; CAS No. : 1330-20-7)
Inoculum :	Degree of elimination
Evaluation parameter :	Aerobic
Degradation rate :	94 %
Test duration :	28 D
Evaluation :	Readily biodegradable (according to OECD criteria).
Method :	OECD 301F
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 :	BOD (% of ThOD) (TOLUENE ; CAS No. : 108-88-3)
Inoculum :	Degree of elimination
Evaluation parameter :	Aerobic
Degradation rate :	80 %
Test duration :	20 D

12.3 Bioaccumulative potential

Parameter :	Bioconcentration factor (BCF) (SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC ; CAS No. : 64742-95-6)
Value :	30,85 - 467
Parameter :	Partition coefficient n-octanol/water (log value) (SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC ; CAS No. : 64742-95-6)
Value :	3,7 - 4,5

No indication of bioaccumulation potential.

12.4 Mobility in soil

Adsorption

Parameter :	Henry's Law Constant (SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC ; CAS No. : 64742-95-6)
Effective dose :	0,001 - 0,019 $Pa.m^3/mol$

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7 Other adverse effects

No information available.

12.8 Additional ecotoxicological information

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Directive 2008/98/EC (Waste Framework Directive)

Before intended use

Waste codes/waste designations according to EWC/AVV

08 01 11* (Waste paint and varnish containing organic solvents or other dangerous substances)

Other disposal recommendations

Dispose of waste according to applicable legislation. Dispose of contents/container to an appropriate recycling or disposal facility. Contaminated packages must be completely emptied and can be re-used following proper cleaning (Water (with cleaning agent)). Handle contaminated packages in the same way as the substance itself.

13.2 Additional information

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

SECTION 14: Transport information

14.1 UN number or ID number

UN 1263

14.2 UN proper shipping name

Land transport (ADR/RID)

PAINT (SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC · ZINC POWDER)

Sea transport (IMDG)

PAINT (SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC · ZINC POWDER)

Air transport (ICAO-TI / IATA-DGR)

PAINT (SOLVENT NAPHTHA (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
Tunnel restriction code :	D/E
Special Provisions :	LQ 5 l · E 1
Hazard label(s) :	

3 / N

Sea transport (IMDG)

Class(es) :	3
EmS-No. :	F-E / S-E
Special Provisions :	LQ 5 l · E 1
Hazard label(s) :	

3 / N

Air transport (ICAO-TI / IATA-DGR)

Class(es) :	3
Special Provisions :	E 1
Hazard label(s) :	

3

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 Maritime transport in bulk according to IMO instruments

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, 40, 48, 75

Restrictions of occupation

Observe restrictions to employment for juveniles 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

Technische Anleitung zur Reinhaltung der Luft (TA-Luft)

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

Water hazard class

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

01. Relevant identified uses · 03. Hazardous ingredients · 08. Occupational exposure limit values · 09. Information on basic physical and chemical properties · 11. Toxicological information · 12. Ecological information

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 Classifiaction 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)
VVEA: Verordnung über die Vermeidung und die Entsorgung von Abfällen
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
|-> COMMISSION REGULATION (EU) 2020/878 of 18 June 2020
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]

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].
Evaluation :
Flam. Liq. 3 : Flash point (°C) EN ISO 13736
Skin Irrit. 2 : Calculation method.
Eye Irrit. 2 : Calculation method.
STOT SE 3 : Calculation method.
STOT RE 2 : Calculation method.
Asp. Tox. 1 : Calculation method.
Aquatic Chronic 2 : Calculation method.

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.
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.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H360	May damage fertility or the unborn child.
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.
EUH066	Repeated exposure may cause skin dryness or cracking.

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.