Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 06.02.2025 Version: 16 (replaces version 15) Revision: 06.02.2025

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

· **1.1 Product identifier**

· **Trade name: POLYFINISH MC-ZINC HS**

· **Article number:** C46-1
· **UFI:** G63S-P092-P00D-MYVY
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
· **Sector of Use**
SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
SU19 Building and construction work
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
· **Product category** PC9a Coatings and paints, thinners, paint removers
· **Process category**
PROC7 Industrial spraying
PROC10 Roller application or brushing
PROC19 Manual activities involving hand contact
PROC13 Treatment of articles by dipping and pouring
· **Application of the substance / the mixture** solvent based, one component polyurethane coating
· **Uses advised against** SU21 Consumer uses: Private households / general public / consumers

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Zandleven Coatings B.V.
Snekertrekweg 57-59, 8912 AA Leeuwarden, Netherlands
Tel: +31 58 2129545 Fax: +31 58 2155996
E-mail: info@zandleven.com Internet: www.zandleven.com

· **Further information obtainable from:** R&D department: sds@zandleven.com
· **1.4 Emergency telephone number:**
Nationaal Vergiftigingen Informatie
+31 (0)88 755 8000
ORFILA (INRS) : + 33 (0)1 45 42 59 59
Centres Antipoison et de Toxicovigilance
ANGERS: 02 41 48 21 21
BORDEAUX: 05 56 96 40 80
LILLE: 0800 59 59 59
LYON: 04 72 11 69 11
MARSEILLE: 04 91 75 25 25
NANCY: 03 83 22 50 50
PARIS: 01 40 05 48 48
STRASBOURG: 03 88 37 37 37
TOULOUSE: 05 61 77 74 47
Giftnotruf der Charité, Berlin: 030/19240
Giftinformationszentrum-Nord der Länder Bremen, Hamburg, Niedersachsen und Schleswig-Holstein (GIZ-Nord) :0551/19 240
Informationszentrale gegen Vergiftungen Zentrum für Kinderheilkunde Universitätsklinikum Bonn: 0228/19240
Giftnotruf Erfurt Gemeinsames Giftinformationszentrum der Länder Mecklenburg-Vorpommern, Sachsen, Sachsen-Anhalt und Thüringen: 0361/730 730
Informations- und Beratungszentrum für Vergiftungsfälle Klinik für Kinder- und Jugendmedizin Universitätsklinikum des Saarlandes: 06841/19240
Giftinformationszentrum der Länder Rheinland-Pfalz und Hessen - Klinische Toxikologie - Universitätsmedizin der Johannes Gutenberg-Universität Mainz: 06131/19240
Vergiftungs-Informations-Zentrale Zentrum für Kinder- und Jugendmedizin Universitätsklinikum: 0761/19240
Giftnotruf München Toxikologische Abteilung der II. Med. Klinik und Poliklinik: 089/19240
Supplier
+31 (0)58 2677590 (during office hours)

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SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**

Flam. Liq. 3	H226 Flammable liquid and vapour.
Acute Tox. 4	H332 Harmful if inhaled.
Skin Irrit. 2	H315 Causes skin irritation.

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Eye Irrit. 2	H319 Causes serious eye irritation.
Resp. Sens. 1	H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1	H317 May cause an allergic skin reaction.
Carc. 2	H351 Suspected of causing cancer.
Aquatic Acute 1	H400 Very toxic to aquatic life.
Aquatic Chronic 1	H410 Very toxic to aquatic life with long lasting effects.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
· **Hazard pictograms**

GHS02 GHS07 GHS08 GHS09

· **Signal word** Danger

· **Hazard-determining components of labelling:**
aromatic polyisocyanate-prepolymer
diphenylmethanediisocyanate,isomeres and homologues
4,4'-methylenediphenyl diisocyanate
o-(p-isocyanatobenzyl)phenyl isocyanate
4-isocyanatosulphonyltoluene
Fatty acids, tall-oil, compds. with oleylamine
· **Hazard statements**
H226 Flammable liquid and vapour.
H332 Harmful if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H410 Very toxic to aquatic life with long lasting effects.
· **Precautionary statements**

P284	[In case of inadequate ventilation] wear respiratory protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P362+P364	Take off contaminated clothing and wash it before reuse.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**
EUH204 Contains isocyanates. May produce an allergic reaction.
As from 24 August 2023 adequate training is required before industrial or professional use.
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

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SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

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· **Dangerous components:**
Percentages of the components are expressed as a percentage by weight

CAS: 7440-66-6 EINECS: 231-175-3 Index number: 030-001-01-9 Reg.nr.: 01-2119467174-37-xxxx	zinc powder -zinc dust (stabilized) Aquatic Acute 1, H400; Aquatic Chronic 1, H410	75-100%
CAS: 128601-23-0 EC number: 918-668-5 Reg.nr.: 01-2119455851-35	C9-aromatics Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Acute Tox. 4, H312; STOT SE 3, H335-H336, EUH066	2.5-10%
CAS: 67815-87-6 EC number: 642-899-8	aromatic polyisocyanate-prepolymer Resp. Sens. 1, H334; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335 ATE: LC50/4 h inhalative: 1.5 mg/l	2.5-10%
CAS: 1314-13-2 EINECS: 215-222-5 Index number: 030-013-00-7 Reg.nr.: 01-2119463881-32	Zinc oxide Aquatic Acute 1, H400; Aquatic Chronic 1, H410	2.5-10%
CAS: 9016-87-9 Index number: 615-005-00-9	diphenylmethanediisocyanate,isomeres and homologues Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335, EUH204 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 % Resp. Sens. 1; H334: C ≥ 0.1 % STOT SE 3; H335: C ≥ 5 %	2.5-10%
CAS: 4083-64-1 EINECS: 223-810-8 Index number: 615-012-00-7 Reg.nr.: 01-2119980050-47	4-isocyanatosulphonyltoluene Resp. Sens. 1, H334; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335, EUH014, EUH204 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 % STOT SE 3; H335: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 %	0-<1%
CAS: 101-68-8 EINECS: 202-966-0 Index number: 615-005-00-9 Reg.nr.: 01-2119457014-47	4,4'-methylenediphenyl diisocyanate Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335, EUH204 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 % Resp. Sens. 1; H334: C ≥ 0.1 % STOT SE 3; H335: C ≥ 5 %	<1%
CAS: 5873-54-1 EINECS: 227-534-9 Index number: 615-005-00-9 Reg.nr.: 01-2119480143-45-xxxx	o-(p-isocyanatobenzyl)phenyl isocyanate Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335, EUH204 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 % Resp. Sens. 1; H334: C ≥ 0.1 % STOT SE 3; H335: C ≥ 5 %	<1%
CAS: 85711-55-3 EINECS: 288-315-1 Reg.nr.: 01-2119974148-28	Fatty acids, tall-oil, compds. with oleylamine STOT RE 2, H373; Eye Dam. 1, H318; Skin Sens. 1A, H317	<1%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

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SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately rinse with water.
· **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:** If symptoms persist consult doctor.
· **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

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SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **For safety reasons unsuitable extinguishing agents:** Water with full jet
· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
· **5.3 Advice for firefighters**
· **Protective equipment:** Mouth respiratory protective device.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
· **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
· **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.

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· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Store material in original, well-closed packages in a cool, well-ventilated area according to local regulations.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** Keep container tightly sealed.
· **Recommended storage temperature:** 5 - 30 °C
· **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**
· **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **DNEL (Derived No Effect Level) for workers:**		
7440-66-6 zinc powder -zinc dust (stabilized)		
Dermal	Long-term - systemic effects, worker	83 mg/kg bw/day (worker)
Inhalative	Long-term - systemic effects, worker	5 mg/m³ (worker)
128601-23-0 C9-aromatics		
Dermal	Long-term - systemic effects, worker	12.5 mg/kg bw/day (human)
Inhalative	Long-term - systemic effects, worker	151 mg/m³ (human)
1314-13-2 Zinc oxide		
Dermal	Long-term - systemic effects, worker	83 mg/kg bw/day (worker)
Inhalative	Long-term - systemic effects, worker	5 mg/m³ (worker)
4083-64-1 4-isocyanatosulphonyltoluene		
Dermal	Long-term - systemic effects, worker	0.92 mg/kg bw/day (human)
Inhalative	Long-term - systemic effects, worker	3.24 mg/m³ (human)
5873-54-1 o-(p-isocyanatobenzyl)phenyl isocyanate		
Inhalative	Acute - local effects, worker	0.1 mg/m³ (human)
	Long-term - local effects, worker	0.05 mg/m³ (human)
85711-55-3 Fatty acids, tall-oil, compds. with oleylamine		
Dermal	Long-term - systemic effects, worker	0.024 mg/kg bw/day (worker)

· **DNEL (Derived No Effect Level) for the general polulation:**		
7440-66-6 zinc powder -zinc dust (stabilized)		
Oral	Long-term - systemic effects, general population	0.83 mg/kg bw/day (general population)
Dermal	Long-term - systemic effects, general population	83 mg/kg bw/day (general population)
Inhalative	Long-term - systemic effects, general population	2.5 mg/m³ (general population)
128601-23-0 C9-aromatics		
Oral	Long-term - systemic effects, general population	7.5 mg/kg bw/day (human)
Dermal	Long-term - systemic effects, general population	7.5 mg/kg bw/day (human)
Inhalative	Long-term - systemic effects, general population	32 mg/m³ (human)
1314-13-2 Zinc oxide		
Oral	Long-term - systemic effects, general population	0.83 mg/kg bw/day (general population)
Dermal	Long-term - systemic effects, general population	83 mg/kg bw/day (general population)
Inhalative	Long-term - systemic effects, general population	2.5 mg/m³ (general population)
4083-64-1 4-isocyanatosulphonyltoluene		
Oral	Long-term - systemic effects, general population	0.46 mg/kg bw/day (human)
Dermal	Long-term - systemic effects, general population	0.46 mg/kg bw/day (human)
Inhalative	Long-term - systemic effects, general population	0.8 mg/m³ (human)
5873-54-1 o-(p-isocyanatobenzyl)phenyl isocyanate		
Inhalative	Acute - local effects, general population	0.05 mg/m³ (human)

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	Long-term - local effects, general population	0.025 mg/m³ (human)
85711-55-3 Fatty acids, tall-oil, compds. with oleylamine		
Oral	Long-term - systemic effects, general population	0.012 mg/kg bw/day (general population)
Dermal	Long-term - systemic effects, general population	0.012 mg/kg bw/day (general population)

· **PNEC (Predicted No Effect Concentration) values:**	
7440-66-6 zinc powder -zinc dust (stabilized)	
Aquatic compartment - freshwater	0.0206 mg/L (not specified)
Aquatic compartment - marine water	0.0061 mg/L (not specified)
Aquatic compartment - sediment in freshwater	117.8 mg/kg sed dw (not specified)
Aquatic compartment - sediment in marine water	56.5 mg/kg sed dw (not specified)
Terrestrial compartment - soil	35.6 mg/kg dw (not specified)
Sewage treatment plant	0.1 mg/L (not specified)
1314-13-2 Zinc oxide	
Aquatic compartment - freshwater	0.0206 mg/L (not specified)
Aquatic compartment - marine water	0.0061 mg/L (not specified)
Aquatic compartment - sediment in freshwater	117.8 mg/kg sed dw (not specified)
Aquatic compartment - sediment in marine water	56.5 mg/kg sed dw (not specified)
Terrestrial compartment - soil	35.6 mg/kg dw (not specified)
Sewage treatment plant	0.1 mg/L (not specified)
85711-55-3 Fatty acids, tall-oil, compds. with oleylamine	
Oral secondary poisoning	0.47 mg/kg food (food sec poisoning)

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne
contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
· **Appropriate engineering controls** No further data; see section 7.
· **Individual protection measures, such as personal protective equipment**
· **General protective and hygienic measures:**
Provide readily accessible eye wash stations and safety showers.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.
· **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If
workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed
respirator complying with an approved standard if a risk assessment indicates this is necessary.
For organic vapors and solvents type of filter A1 or A2, for dust type of filter P (according to EN 140)
· **Hand protection**

Protective gloves

Chemical resistant gloves (EN 374)
Check protective gloves prior to each use for their proper condition.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Fluorocarbon rubber (Viton)
Nitrile rubber, NBR
· **Penetration time of glove material**
KCL Camatril 730
breakthrough time > 480 min.
thickness: 0,4 mm
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Not suitable are gloves made of the following materials:**
Neoprene gloves
Disposables
· **Eye/face protection**

Tightly sealed goggles

Safety glasses according to EN 166 or equivalent
· **Body protection:**
Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved before the product is used by a specialist.
If there is a risk of ignition by static electricity, anti-static protective clothing should be worn. For the best protection against static discharge, clothing should consist of anti-static overalls, boots and gloves.
For further information on materials and design requirements and test methods consult the European standard EN 1149.
· **Environmental exposure controls**
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**
· **General Information**

· **Physical state**	Liquid
· **Colour:**	According to product specification
· **Odour:**	Characteristic
· **Odour threshold:**	Not determined.
· **Melting point/freezing point:**	Undetermined.
· **Boiling point or initial boiling point and boiling range**	165 °C (Hydrocarbons, C9, aromatics)
· **Flammability**	Flammable.
· **Lower and upper explosion limit**	
· **Lower:**	Not determined.
· **Upper:**	Not determined.
· **Flash point:**	51 °C
· **Auto-ignition temperature:**	450 °C (Hydrocarbons, C9, aromatics)
· **Decomposition temperature:**	Not determined.
· **pH**	Not determined.
· **Viscosity:**	
· **Kinematic viscosity**	at 40 °C: > 20,5 mm²/s
· **Dynamic at 20 °C:**	500 mPas
· **Solubility**	
· **water:**	Not miscible or difficult to mix.
· **Partition coefficient n-octanol/water (log value)**	Not determined.

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· **Vapour pressure:**	Not determined.
· **Density and/or relative density**	
· **Density at 20 °C:**	>3.49-<3.53 g/cm³
· **Relative density**	Not determined.
· **Vapour density**	Not determined.

· **9.2 Other information**	
· **Appearance:**	
· **Form:**	Fluid
· **Important information on protection of health and environment, and on safety.**	
· **Ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· **Change in condition**	
· **Evaporation rate**	Not determined.

· **Information with regard to physical hazard classes**	
· **Explosives**	Void
· **Flammable gases**	Void
· **Aerosols**	Void
· **Oxidising gases**	Void
· **Gases under pressure**	Void
· **Flammable liquids**	Flammable liquid and vapour.
· **Flammable solids**	Void
· **Self-reactive substances and mixtures**	Void
· **Pyrophoric liquids**	Void
· **Pyrophoric solids**	Void
· **Self-heating substances and mixtures**	Void
· **Substances and mixtures, which emit flammable gases in contact with water**	Void
· **Oxidising liquids**	Void
· **Oxidising solids**	Void
· **Organic peroxides**	Void
· **Corrosive to metals**	Void
· **Desensitised explosives**	Void

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

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SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
· **Acute toxicity** Harmful if inhaled.

· **LD/LC50 values relevant for classification:**		
7440-66-6 zinc powder -zinc dust (stabilized)		
Oral	LD50	>2,000 mg/kg (rat)
128601-23-0 C9-aromatics		
Oral	LD50	5,558-7,093 mg/kg (rat)
Dermal	LD50	2,000-3,160 mg/kg (rabbit)

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67815-87-6 aromatic polyisocyanate-prepolymer		
Inhalative	LC50/4 h	1.5 mg/l (ATE)
1314-13-2 Zinc oxide		
Oral	LD50	>5,000 mg/kg (rat)
9016-87-9 diphenylmethanediisocyanate,isomeres and homologues		
Oral	LD50	49,000 mg/kg (rat)
Dermal	LD50	>9,400 mg/kg (rabbit)
Inhalative	LC50/4 h	1.5 mg/l (ate)
		0.49 mg/l (rat)
4083-64-1 4-isocyanatosulphonyltoluene		
Oral	LD50	2,230 mg/kg (rat)
101-68-8 4,4'-methylenediphenyl diisocyanate		
Oral	LD50	2,200 mg/kg (mouse)
5873-54-1 o-(p-isocyanatobenzyl)phenyl isocyanate		
Inhalative	LC50/4 h	1.5 mg/l (ate)

· **Primary irritant effect:**
· **Skin corrosion/irritation** Causes skin irritation.
· **Serious eye damage/irritation** Causes serious eye irritation.
· **Respiratory or skin sensitisation**
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Suspected of causing cancer.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT-single exposure** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure** Based on available data, the classification criteria are not met.
· **Aspiration hazard** Based on available data, the classification criteria are not met.
· **11.2 Information on other hazards**

· **Endocrine disrupting properties**
None of the ingredients is listed.

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SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**	
7440-66-6 zinc powder -zinc dust (stabilized)	
LC50/96 h	0.24 mg/l (Oncorhynchus mykiss)
LC50/48 h	0.068 mg/l (Daphnia magna)
	0.645-1 mg/l (Penaeus chinensis (fleshy prawn))
1314-13-2 Zinc oxide	
EC50/72 h	0.21 mg/l (algae)
EC50/48 h	0.67 mg/l (Ceriodaphnia dubia)
4083-64-1 4-isocyanatosulphonyltoluene	
EC50/72 h	25-30 mg/l (aquatic algae and cyanobacteria)
EC50/48 h	100 mg/l (aquatic invertebrates)
EC50/24 h	100 mg/l (aquatic invertebrates)
LC50/96 h	45 mg/l (fish)
LC50/48 h	45 mg/l (fish)
5873-54-1 o-(p-isocyanatobenzyl)phenyl isocyanate	
NOEC 21 days	10 mg/l (aquatic invertebrates)

· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.

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· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
· **12.7 Other adverse effects**
· **Remark:** Very toxic for fish
· **Additional ecological information:**
· **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms

SECTION 13: Disposal considerations

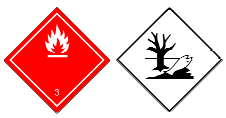
· **13.1 Waste treatment methods**
· **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**	
08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01 00	wastes from MFSU and removal of paint and varnish
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
HP3	Flammable
HP7	Carcinogenic
HP14	Ecotoxic

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

Transport in accordance with ADR/RID, IMDG and ICAO/IATA.

· **14.1 UN number or ID number**	
· **ADR/RID/ADN, IMDG, IATA**	UN1263
· **14.2 UN proper shipping name**	
· **ADR/RID/ADN**	1263 PAINT, ENVIRONMENTALLY HAZARDOUS
· **IMDG**	PAINT, MARINE POLLUTANT
· **IATA**	PAINT
· **14.3 Transport hazard class(es)**	
· **ADR/RID/ADN, IMDG**	
· **Class**	3 Flammable liquids.

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· **Label**	3
· **IATA**	
	
· **Class**	3 Flammable liquids.
· **Label**	3
· **14.4 Packing group**	
· **ADR/RID/ADN, IMDG, IATA**	III
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	Yes Symbol (fish and tree)
· **Special marking (ADR/RID/ADN):**	Symbol (fish and tree)
· **14.6 Special precautions for user**	Warning: Flammable liquids.
· **Hazard identification number (Kemler code):**	30
· **EMS Number:**	F-E,S-E
· **Stowage Category**	A
· **14.7 Maritime transport in bulk according to IMO instruments**	Not applicable.
· **Transport/Additional information:**	
· **ADR/RID/ADN**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **Transport category**	3
· **Tunnel restriction code**	D/E
· **IMDG**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **UN "Model Regulation":**	UN 1263 PAINT, 3, III, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

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

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.
· **Seveso category**
E1 Hazardous to the Aquatic Environment
P5c FLAMMABLE LIQUIDS
· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 56a, 56b, 74

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
None of the ingredients is listed.

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· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

· **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Classification according to Regulation (EC) No 1272/2008**
The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

· **Contact:** J. Dijkstra

· **Date of previous version:** 20.04.2023

· **Version number of previous version:** 15

· **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
ATE: Acute toxicity estimate values
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1A: Skin sensitisation – Category 1A
Carc. 2: Carcinogenicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

· **Sources**
- ECHA European Chemical Agency - http://echa.europa.eu/information-on-chemicals
- SDS of raw materials supplied by producer/supplier.

· *** Data compared to the previous version altered.**