



Safety data sheet

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

Printing date 06.02.2025

Version: 17 (replaces version 16)

Revision: 06.02.2025

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

- **1.1 Product identifier**
 - **Trade name:** POLYFINISH HS-ZL
 - **Article number:** M4-1
 - **UFI:** S36C-81HH-N00G-46UF
- **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, two component polyurethane coating base
- **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)

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.
 - Skin Sens. 1 H317 May cause an allergic skin reaction.
 - Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

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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

Signal word Warning

Hazard-determining components of labelling:

Reaction products of fatty acids, tall oil and fatty acids, C18 unsaturated, trimers and fatty acids, C18 unsaturated, dimers with (9Z)-octadec-9-en-1-amine
Octadecanoic acid, 12-hydroxy-, reaction products with hexamethylenediamine

Hazard statements

H226 Flammable liquid and vapour.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

Percentages of the components are expressed as a percentage by weight

CAS: 123-86-4 EINECS: 204-658-1 Index number: 607-025-00-1 Reg.nr.: 01-2119485493-29	n-butyl acetate Flam. Liq. 3, H226; STOT SE 3, H336, EUH066	10-25%
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: 108-65-6 EINECS: 203-603-9 Index number: 607-195-00-7 Reg.nr.: 01-2119475791-29	2-methoxy-1-methylethyl acetate Flam. Liq. 3, H226; STOT SE 3, H336	2.5-10%

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CAS: 107-98-2 EINECS: 203-539-1 Index number: 603-064-00-3 Reg.nr.: 01-2119457435-35	1-Methoxy-2-propanol ⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	2.5-10%
	Octadecanoic acid, 12-hydroxy-, reaction products with hexamethylenediamine ⚠ STOT RE 2, H373; ⚠ Skin Sens. 1B, H317; Aquatic Chronic 4, H413	<1%
EC number: 942-330-6 Reg.nr.: 01-2120101675-63	Reaction products of fatty acids, tall oil and fatty acids, C18 unsaturated, trimers and fatty acids, C18 unsaturated, dimers with (9Z)-octadec-9-en-1-amine ⚠ STOT RE 2, H373; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; ⚠ Skin Irrit. 2, H315; ⚠ Skin Sens. 1A, H317; Aquatic Chronic 3, H412	<1%

Additional information:

Note P of Annex 1A (67/548/EEC) applies to the product or one or more of its components (benzene <0.1 wt.%).

For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Immediately remove any clothing soiled by the product.

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.

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.

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: No special measures required.

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.

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See Section 13 for disposal information.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

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.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

123-86-4 n-butyl acetate

IOELV Short-term value: 723 mg/m³, 150 ppm
Long-term value: 241 mg/m³, 50 ppm

108-65-6 2-methoxy-1-methylethyl acetate

IOELV Short-term value: 550 mg/m³, 100 ppm
Long-term value: 275 mg/m³, 50 ppm
Skin

107-98-2 1-Methoxy-2-propanol

IOELV Short-term value: 568 mg/m³, 150 ppm
Long-term value: 375 mg/m³, 100 ppm
Skin

DNEL (Derived No Effect Level) for workers:

123-86-4 n-butyl acetate

Dermal	Acute - systemic effects, worker	11 mg/kg bw/day (human)
	Long-term - systemic effects, worker	11 mg/kg bw/day (human)
Inhalative	Acute - systemic effects, worker	600 mg/m ³ (human)
	Acute - local effects, worker	600 mg/m ³ (human)
	Long-term - systemic effects, worker	300 mg/m ³ (worker)
	Long-term - local effects, worker	300 mg/m ³ (human)

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/m ³ (human)

108-65-6 2-methoxy-1-methylethyl acetate

Dermal	Long-term - systemic effects, worker	153.5 mg/kg bw/day (worker)
Inhalative	Long-term - systemic effects, worker	275 mg/m ³ (worker)

107-98-2 1-Methoxy-2-propanol

Dermal	Long-term - systemic effects, worker	50.6 mg/kg bw/day (worker)
Inhalative	Acute - local effects, worker	553.5 mg/m ³ (worker)
	Long-term - systemic effects, worker	369 mg/m ³ (worker)

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Octadecanoic acid, 12-hydroxy-, reaction products with hexamethylenediamine

Dermal	Acute - systemic effects, worker	10 mg/kg bw/day (worker)
	Long-term - systemic effects, worker	10 mg/kg bw/day (worker)
Inhalative	Acute - systemic effects, worker	35.24 mg/m ³ (worker)
	Long-term - systemic effects, worker	35.24 mg/m ³ (worker)

Reaction products of fatty acids, tall oil and fatty acids, C18 unsaturated, trimers and fatty acids, C18 unsaturated, dimers with (9Z)-octadec-9-en-1-amine

Dermal	Long-term - systemic effects, worker	0.43 mg/kg bw/day (worker)
Inhalative	Long-term - systemic effects, worker	0.75 mg/m ³ (worker)

DNEL (Derived No Effect Level) for the general population:
123-86-4 n-butyl acetate

Oral	Acute - systemic effects, general population	2 mg/kg bw/day (human)
	Long-term - systemic effects, general population	2 mg/kg bw/day (human)
Dermal	Acute - systemic effects, general population	6 mg/kg bw/day (human)
	Long-term - systemic effects, general population	6 mg/kg bw/day (human)
Inhalative	Acute - systemic effects, general population	300 mg/m ³ (general population)
	Acute - local effects, general population	300 mg/m ³ (human)
	Long-term - systemic effects, general population	35.7 mg/m ³ (general population)
	Long-term - local effects, general population	35.7 mg/m ³ (human)

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/m ³ (human)

108-65-6 2-methoxy-1-methylethyl acetate

Oral	Long-term - systemic effects, general population	1.67 mg/kg bw/day (general population)
Dermal	Long-term - systemic effects, general population	54.8 mg/kg bw/day (general population)
Inhalative	Long-term - systemic effects, general population	33 mg/m ³ (general population)

107-98-2 1-Methoxy-2-propanol

Oral	Long-term - systemic effects, general population	3.3 mg/kg bw/day (general population)
Dermal	Long-term - systemic effects, general population	18.1 mg/kg bw/day (general population)
Inhalative	Long-term - systemic effects, general population	43.9 mg/m ³ (general population)

Octadecanoic acid, 12-hydroxy-, reaction products with hexamethylenediamine

Oral	Acute - systemic effects, general population	5 mg/kg bw/day (general population)
	Long-term - systemic effects, general population	5 mg/kg bw/day (general population)
Dermal	Acute - systemic effects, general population	5 mg/kg bw/day (general population)
	Long-term - systemic effects, general population	5 mg/kg bw/day (general population)
Inhalative	Acute - systemic effects, general population	8.69 mg/m ³ (general population)
	Long-term - systemic effects, general population	8.69 mg/m ³ (general population)

Reaction products of fatty acids, tall oil and fatty acids, C18 unsaturated, trimers and fatty acids, C18 unsaturated, dimers with (9Z)-octadec-9-en-1-amine

Oral	Long-term - systemic effects, general population	0.11 mg/kg bw/day (general population)
Dermal	Long-term - systemic effects, general population	0.21 mg/kg bw/day (general population)
	Long-term - local effects, general population	11.3 mg/kg (general population)
Inhalative	Long-term - systemic effects, general population	0.37 mg/m ³ (general population)

PNEC (Predicted No Effect Concentration) values:
123-86-4 n-butyl acetate

Aquatic compartment - freshwater		0.18 mg/L (freshwater)
Aquatic compartment - marine water		0.018 mg/L (marine water)
Aquatic compartment - water, intermittent releases		0.36 mg/L (not specified)
Aquatic compartment - sediment in freshwater		0.981 mg/kg sed dw (not specified)
Aquatic compartment - sediment in marine water		0.0981 mg/kg sed dw (not specified)

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Terrestrial compartment - soil	0.0903 mg/kg dw (not specified)
Sewage treatment plant	35.6 mg/L (not specified)
108-65-6 2-methoxy-1-methylethyl acetate	
Aquatic compartment - freshwater	0.635 mg/L (not specified)
Aquatic compartment - marine water	0.0635 mg/L (not specified)
Aquatic compartment - water, intermittent releases	6.35 mg/L (not specified)
Aquatic compartment - sediment in freshwater	3.29 mg/kg sed dw (not specified)
Aquatic compartment - sediment in marine water	0.329 mg/kg sed dw (not specified)
Terrestrial compartment - soil	0.29 mg/kg dw (not specified)
Sewage treatment plant	100 mg/L (not specified)
107-98-2 1-Methoxy-2-propanol	
Aquatic compartment - freshwater	10 mg/L (not specified)
Aquatic compartment - marine water	1 mg/L (not specified)
Aquatic compartment - water, intermittent releases	100 mg/L (not specified)
Aquatic compartment - sediment in freshwater	52.3 mg/kg sed dw (not specified)
Aquatic compartment - sediment in marine water	5.2 mg/kg sed dw (not specified)
Terrestrial compartment - soil	5.49 mg/kg dw (not specified)
Sewage treatment plant	100 mg/L (not specified)
Octadecanoic acid, 12-hydroxy-, reaction products with hexamethylenediamine	
Aquatic compartment - freshwater	0.2 mg/L (freshwater)
Aquatic compartment - marine water	0.02 mg/L (marine water)
Aquatic compartment - water, intermittent releases	0.18 mg/L (intermittent release water)
Aquatic compartment - sediment in freshwater	860 mg/kg sed dw (sediment fresh water)
Aquatic compartment - sediment in marine water	86 mg/kg sed dw (sediment marine water)
Terrestrial compartment - soil	171.5 mg/kg dw (soil)
Sewage treatment plant	10 mg/L (sewage treatment plant)
Oral secondary poisoning	27.8 mg/kg food (food sec poisoning)
Reaction products of fatty acids, tall oil and fatty acids, C18 unsaturated, trimers and fatty acids, C18 unsaturated, dimers with (9Z)-octadec-9-en-1-amine	
Aquatic compartment - freshwater	0.194 mg/L (freshwater)
Aquatic compartment - marine water	0.019 mg/L (marine water)
Aquatic compartment - water, intermittent releases	0.097 mg/L (intermittent release water)
Aquatic compartment - sediment in freshwater	29.6 mg/kg sed dw (sediment fresh water)
Aquatic compartment - sediment in marine water	2.96 mg/kg sed dw (sediment marine water)
Terrestrial compartment - soil	120 mg/kg dw (soil)
Sewage treatment plant	100 mg/L (sewage treatment plant)
Oral secondary poisoning	0.416 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.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.

• **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

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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

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.

Butyl rubber, BR

Penetration time of glove material

KCL Butoject 897/898

breakthrough time 95 min.

thickness: 0,3 / 0,7 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:

Nitrile rubber, NBR

Natural rubber, NR

Neoprene gloves

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.

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

124-128 °C (123-86-4 n-butyl acetate)

Flammability

Flammable.

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· Lower and upper explosion limit	
· Lower:	1.2 Vol % (123-86-4 n-butyl acetate)
· Upper:	7.5 Vol % (123-86-4 n-butyl acetate)
· Flash point:	27 °C
· Auto-ignition temperature:	315 °C (108-65-6 2-methoxy-1-methylethyl acetate)
· Decomposition temperature:	Not determined.
· pH	Not determined.
· Viscosity:	
· Kinematic viscosity	at 40 °C: > 20,5 mm ² /s
· Dynamic at 20 °C:	700 mPas
· Solubility	
· water:	Not miscible or difficult to mix.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure at 20 °C:	10.7 hPa (123-86-4 n-butyl acetate)
· Vapour pressure at 50 °C:	55 hPa
· Density and/or relative density	
· Density at 20 °C:	~1.48~1.5 g/cm ³
· 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.

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· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

· **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**

123-86-4 n-butyl acetate

Oral	LD50	10,760 mg/kg (rat)
Dermal	LD50	>17,600 mg/kg (rabbit)
Inhalative	LC50/4 h	23.4 mg/l (rat)

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Oral	LD50	5,558-7,093 mg/kg (rat)
Dermal	LD50	2,000-3,160 mg/kg (rabbit)

108-65-6 2-methoxy-1-methylethyl acetate

Oral	LD50	8,532 mg/kg (rat)
Inhalative	LC50/4 h	35.7 mg/l (rat)

107-98-2 1-Methoxy-2-propanol

Oral	LD50	5,660 mg/kg (rat)
Dermal	LD50	13,000 mg/kg (rabbit)

· **Primary irritant effect:**

· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

· **Serious eye damage/irritation** Based on available data, the classification criteria are not met.

· **Respiratory or skin sensitisation** May cause an allergic skin reaction.

· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

· **Carcinogenicity** Based on available data, the classification criteria are not met.

· **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.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

123-86-4 n-butyl acetate

EC50/72 h	647.7 mg/l (algae)
EC50/48 h	44 mg/l (Daphnia magna)
EC50/24 h	335 mg/l (aquatic algae and cyanobacteria)
LC50/96 h	18 mg/l (pimephales promelas)
NOEC 21 days	23.2 mg/l (aquatic invertebrates)

108-65-6 2-methoxy-1-methylethyl acetate

EC50/48 h	408-500 mg/l (Daphnia magna)
LC50/96 h	100-180 mg/l (Oncorhynchus mykiss)

107-98-2 1-Methoxy-2-propanol

EC50/48 h	23,300 mg/l (Daphnia magna)
LC50/96 h	6,812 mg/l (Leuciscus idus)

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

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- **12.4 Mobility in soil** No further relevant information available.
- **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:** Harmful to 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.
Harmful to 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
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, ADN, IMDG**

Void

· **IATA**

UN1263

- **14.2 UN proper shipping name**

· **ADR/RID/ADN, ADN, IMDG**

Void

· **IATA**

PAINT

- **14.3 Transport hazard class(es)**

· **ADR/RID/ADN, ADN, IMDG**· **Class**

Void

· **IATA**· **Class**

3 Flammable liquids.

· **Label**

3

- **14.4 Packing group**

· **ADR/RID/ADN, IMDG**

Void

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· IATA	III
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable.
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	
· ADR/RID/ADN	
· Remarks:	Up to 450 litre exempted according to ADR 2.2.3.1.5.
· IMDG	
· Remarks:	Up to 450 litre: Transport in accordance with Packs 2.3.2.5 of the IMDG Code.
· IATA	
· Remarks:	The "viscosity exemption" provisions do NOT apply to air transport.
· UN "Model Regulation":	Void

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 P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

· 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.

· 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

108-88-3 | toluene

3

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

108-88-3 | toluene

3

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

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

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EU

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- **Date of previous version:** 20.04.2023

- **Version number of previous version:** 16

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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

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

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1A: Skin sensitisation – Category 1A

Skin Sens. 1B: Skin sensitisation – Category 1B

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 Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4

- **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.**