

Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878 Issue date: 2/8/2021 Revision date: 1/2/2023 Version: 2.00

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

1.1. Product identifier

Product form	
Name	
Trade name	

- : Mixture
 - : Polyurethane topcoat semi-matt
 - : NOVOPUR 1990 TIX

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

1.2.1. Relevant identified uses

Use of the substance/mixture

: The product is intended for professional use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

NOVOL Sp. z o.o. Żabikowska 7/9 62-052 KOMORNIKI Poland T 0048618109800 - F 0048618109809 www.novol.com E-mail address of competent person responsible for the SDS : dokumentacja@novol.com

1.4. Emergency telephone number

Emergency number

: 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]		
Flammable liquids, Category 3	H226	
Skin corrosion/irritation, Category 2	H315	
Skin sensitisation, Category 1	H317	
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412	

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP)

Signal word (CLP)
Contains
Hazard statements (CLP)

Precautionary statements (CLP)



- : xylene
- : H226 Flammable liquid and vapour.
 - H315 Causes skin irritation.
 - H317 May cause an allergic skin reaction.
- H412 Harmful to aquatic life with long lasting effects.

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 - Avoid breathing vapours, spray.

Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves, protective clothing, eye protection, face protection.

P312 - Call doctor if you feel unwell.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-methoxy-1-methylethyl acetate substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 108-65-6 EC-No.: 203-603-9 EC Index-No.: 607-195-00-7 REACH-no: 01-2119475791- 29	< 30	Flam. Liq. 3, H226
xylene substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit (Note C)	CAS-No.: 1330-20-7 EC-No.: 215-535-7 EC Index-No.: 601-022-00-9 REACH-no: 01-2119488216- 32	< 15	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315
n-butyl acetate substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 123-86-4 EC-No.: 204-658-1 EC Index-No.: 607-025-00-1 REACH-no: 01-2119485493- 29	< 15	Flam. Liq. 3, H226 STOT SE 3, H336
ethylbenzene substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 100-41-4 EC-No.: 202-849-4 EC Index-No.: 601-023-00-4 REACH-no: 01-2119489370- 35	< 3	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 STOT RE 2, H373 Asp. Tox. 1, H304
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4- piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl- 4-piperidyl sebacate	CAS-No.: 1065336-91-5 EC-No.: 915-687-0 REACH-no: 01-2119491304- 40	≤ 1	Skin Sens. 1A, H317 Repr. 2, H361f Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2-hydroxyethyl methacrylate (Note D)	CAS-No.: 868-77-9 EC-No.: 212-782-2 EC Index-No.: 607-124-00-X REACH-no: 01-2119490169- 29	< 0.4	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
n-butyl methacrylate (Note D)	CAS-No.: 97-88-1 EC-No.: 202-615-1 EC Index-No.: 607-033-00-5 REACH-no: 01-2119486394- 28	< 0.4	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335

Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878

Note C - Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Note D - Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words 'non-stabilised'. Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures	8	
First-aid measures general	: General information. Refer to section 11.	
First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.	
First-aid measures after skin contact	: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. If skin irritation continues, consult a doctor.	
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.	
First-aid measures after ingestion	: If swallowed: rinse mouth. Do NOT induce vomiting. Call a physician immediately.	
4.2. Most important symptoms and effects, both acute and delayed		
Symptoms/effects after inhalation	: Vapours may cause drowsiness and dizziness.	
Symptoms/effects after skin contact	: Prolonged or repeated contact may cause skin to become dry.	
Symptoms/effects after eye contact	: May cause eye irritation.	

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

Treat symptomatically.

SECTION 5: Firefighting measures			
5.1. Extinguishing media			
Suitable extinguishing media Unsuitable extinguishing media	Dry chemical, CO2, alcohol-resistant foam or waterspray.Do not use a heavy water stream.		
5.2. Special hazards arising from the substance or mixture			
Hazardous decomposition products in case of fire	: Carbon monoxide. Other toxic gases.		
5.3. Advice for firefighters			
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.		

SECTION 6: Accidental release measures		
6.1. Personal precautions, protection	ve equipment and emergency procedures	
6.1.1. For non-emergency personnel		
Protective equipment	: Remove ignition sources. Ensure that there is a suitable ventilation system. Avoid any direct or indirect contact with ingredients released. Avoid contact with skin and eyes. Use personal protective equipment as required. See Section 8.	
6.1.2. For emergency responders		
Protective equipment	: Do not attempt to take action without suitable protective equipment. See Section 8.	

Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878

6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter into surface water or drains. Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.

6.3. Methods and material for containment and cleaning up

For containment

: Cover spill with non combustible material, e.g.: sand, earth, vermiculite. Mechanically recover the product.

6.4. Reference to other sections

Disposal considerations. See Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Hygiene measures	 Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Wear personal protective equipment. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. 	
7.2. Conditions for safe storage, including any incompatibilities		
Technical measures	. Ground/bond container and receiving equipment	

Technical measures	: Ground/bond container and receiving equipment.
Storage conditions	: Store in a well-ventilated place. Keep cool. Keep container tightly closed.
Storage temperature	: 5−35 °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

xylene (1330-20-7)		
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	Xylene, mixed isomers, pure	
IOEL TWA [ppm]	50 ppm	
IOEL STEL	442 mg/m ³	
IOEL STEL [ppm]	100 ppm	
Remark	Skin	
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC	
United Kingdom - Occupational Exposure Limits		
Local name	Xylene	
WEL TWA (OEL TWA) [1]	220 mg/m ³ o-,m-,p- or mixed isomers	
WEL TWA (OEL TWA) [2]	50 ppm o-,m-,p- or mixed isomers	
WEL STEL (OEL STEL)	441 mg/m ³ o-,m-,p- or mixed isomers	
WEL STEL (OEL STEL) [ppm]	100 ppm o-,m-,p- or mixed isomers	

Safety Data Sheet

xylene (1330-20-7)		
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	
United Kingdom - Biological limit values		
Local name	Xylene, o-, m-, p- or mixed isomers	
BMGV	650 mmol/mol Creatinine Parameter: methyl hippuric acid - Medium: urine - Sampling time: Post shift	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	
n-butyl acetate (123-86-4)		
EU - Indicative Occupational Exposure L	imit (IOEL)	
Local name	n-Butyl acetate	
IOEL TWA [ppm]	50 ppm	
IOEL STEL	723 mg/m ³	
IOEL STEL [ppm]	150 ppm	
Regulatory reference	COMMISSION DIRECTIVE (EU) 2019/1831	
United Kingdom - Occupational Exposur	e Limits	
Local name	Butyl acetate	
WEL TWA (OEL TWA) [1]	724 mg/m ³	
WEL TWA (OEL TWA) [2]	150 ppm	
WEL STEL (OEL STEL)	966 mg/m ³	
WEL STEL (OEL STEL) [ppm]	200 ppm	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	
ethylbenzene (100-41-4)		
EU - Indicative Occupational Exposure L	imit (IOEL)	
Local name	Ethylbenzene	
IOEL TWA [ppm]	100 ppm	
IOEL STEL	884 mg/m ³	
IOEL STEL [ppm]	200 ppm	
Remark	Skin	
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC	
United Kingdom - Occupational Exposur	e Limits	
Local name	Ethylbenzene	
WEL TWA (OEL TWA) [1]	441 mg/m ³	
WEL TWA (OEL TWA) [2]	100 ppm	
WEL STEL (OEL STEL)	552 mg/m ³	
WEL STEL (OEL STEL) [ppm]	125 ppm	
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878

2-methoxy-1-methylethyl acetate (108-65-6)		
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	2-Methoxy-1-methylethylacetate	
IOEL TWA [ppm]	50 ppm	
IOEL STEL	550 mg/m ³	
IOEL STEL [ppm]	100 ppm	
Remark	Skin	
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC	
United Kingdom - Occupational Exposure Limits		
Local name	1-Methoxypropyl acetate	
WEL TWA (OEL TWA) [1]	274 mg/m ³	
WEL TWA (OEL TWA) [2]	50 ppm	
WEL STEL (OEL STEL)	548 mg/m ³	
WEL STEL (OEL STEL) [ppm]	100 ppm	
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

8.1.2. Recommended monitoring procedures

Monitoring methods

Monitoring methods	EN 482. Workplace exposure - General requirements for the performance of procedures
	for the measurement of chemical agents.

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

xylene (1330-20-7)		
DNEL/DMEL (Workers)		
Acute - systemic effects, inhalation	289 mg/m ³	
Acute - local effects, inhalation	289 mg/m ³	
Long-term - systemic effects, dermal	180 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	77 mg/m ³	
DNEL/DMEL (General population)		
Acute - systemic effects, inhalation	174 mg/m ³	
Acute - local effects, inhalation	174 mg/m ³	
Long-term - systemic effects,oral	1.6 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	14.8 mg/m ³	
Long-term - systemic effects, dermal	108 mg/kg bodyweight/day	
PNEC (Water)		
PNEC aqua (freshwater)	0.327 mg/l	
PNEC aqua (marine water)	0.327 mg/l	
PNEC aqua (intermittent, freshwater)	0.327 mg/l	

Safety Data Sheet

xylene (1330-20-7)	
PNEC (Sediment)	
PNEC sediment (freshwater)	12.46 mg/kg dwt
PNEC sediment (marine water)	12.46 mg/kg dwt
PNEC (Soil)	
PNEC soil	2.31 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	6.58 mg/l
n-butyl acetate (123-86-4)	
PNEC (Water)	
PNEC aqua (freshwater)	0.18 mg/l
PNEC aqua (marine water)	0.018 mg/l
PNEC aqua (intermittent, freshwater)	0.36 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.981 mg/kg dwt
PNEC sediment (marine water)	0.0981 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.0903 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	35.6 mg/l
ethylbenzene (100-41-4)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	293 mg/m ³
Long-term - systemic effects, dermal	180 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	77 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	1.6 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	15 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0.1 mg/l
PNEC aqua (marine water)	0.01 mg/l
PNEC aqua (intermittent, freshwater)	0.1 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	13.7 mg/kg dwt
PNEC sediment (marine water)	1.37 mg/kg dwt
PNEC (Soil)	
PNEC soil	2.68 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	0.02 g/kg food

Safety Data Sheet

ethylbenzene (100-41-4)	
PNEC (STP)	
PNEC sewage treatment plant	9.6 mg/l
2-methoxy-1-methylethyl acetate (108-65-	-6)
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	550 mg/m ³
Long-term - systemic effects, dermal	796 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	275 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	36 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	33 mg/m ³
Long-term - systemic effects, dermal	320 mg/kg bodyweight/day
Long-term - local effects, inhalation	33 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0.635 mg/l
PNEC aqua (marine water)	0.0635 mg/l
PNEC aqua (intermittent, freshwater)	6.35 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3.29 mg/kg dwt
PNEC sediment (marine water)	0.329 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.29 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	100 mg/l
Reaction mass of Bis(1,2,2,6,6-pentameth (1065336-91-5)	nyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	0.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.68 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	0.05 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.17 mg/m ³
Long-term - systemic effects, dermal	0.25 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.0022 mg/l
PNEC aqua (marine water)	0.00022 mg/l
PNEC aqua (intermittent, freshwater)	0.009 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	1.05 mg/kg dwt
PNEC sediment (marine water)	0.11 mg/kg dwt

Safety Data Sheet

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (1065336-91-5)	
PNEC (Soil)	
PNEC soil	0.21 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	1 mg/l
2-hydroxyethyl methacrylate (868-77-9)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	1.3 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	4.9 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	0.83 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	2.9 mg/m ³
Long-term - systemic effects, dermal	0.83 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.482 mg/l
PNEC aqua (marine water)	0.482 mg/l
PNEC aqua (intermittent, freshwater)	1 mg/l
PNEC aqua (intermittent, marine water)	1 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3.79 mg/kg dwt
PNEC sediment (marine water)	3.79 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.476 mg/kg dwt
PNEC (STP)	·
PNEC sewage treatment plant	10 mg/l
n-butyl methacrylate (97-88-1)	
DNEL/DMEL (Workers)	
Acute - local effects, dermal	1 % in mixture
Long-term - systemic effects, dermal	5 mg/kg bodyweight/day
Long-term - local effects, dermal	1 % in mixture
Long-term - systemic effects, inhalation	415.9 mg/m ³
Long-term - local effects, inhalation	409 mg/m ³
DNEL/DMEL (General population)	· · ·
Acute - local effects, dermal	1 % in mixture
Long-term - systemic effects, inhalation	66.5 mg/m ³
Long-term - systemic effects, dermal	3 mg/kg bodyweight/day
Long-term - local effects, dermal	1 % in mixture
Long-term - local effects, inhalation	366.4 mg/m ³

Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878

n-butyl methacrylate (97-88-1)	
PNEC (Water)	
PNEC aqua (freshwater)	0.0169 mg/l
PNEC aqua (marine water)	0.00169 mg/l
PNEC aqua (intermittent, freshwater)	0.056 mg/l
PNEC (Sediment)	'
PNEC sediment (freshwater)	4.73 mg/kg dwt
PNEC sediment (marine water)	0.473 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.935 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	31.7 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Viton® II	6 (> 480 minutes)	0,7 mm		EN 374-3
Disposable gloves	Nitrile rubber (NBR)	2 (> 30 minutes)	0,4 mm		EN 374-3

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878

Respiratory protection			
Device	Filter type	Condition	Standard
Gas mask with filter type	Filter A1/B1		EN 14387

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid	
Colour	: Colourless.	
Odour	: characteristic.	
Odour threshold	: 0.9 – 9 mg/m ³ Xylene	
Melting point	: Not applicable	
Freezing point	: Not available	
• •	: 127 °C	
Boiling point	=. •	
Flammability	: Not applicable	
Explosive properties	: No data available.	
Explosive limits	: Not available	
Lower explosion limit	: 1.1 vol % Xylene	
Upper explosion limit	: 8 vol % Xylene	
Flash point	: 24 °C	
Auto-ignition temperature	: 450 °C	
Decomposition temperature	: Not available	
рН	: Not available	
Viscosity, kinematic	: Not available	
Solubility	: Slightly soluble.	
Partition coefficient n-octanol/water (Log Kow)	: Not available	
Vapour pressure	: 9 hPa	
Vapour pressure at 50°C	: Not available	
Density	: 1.1 g/cm ³	
Relative density	: Not available	
Relative vapour density at 20°C	: Not available	
Particle characteristics	: Not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions of use.

Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Keep away from sources of ignition. Prevent build-up of electrostatic charges (e.g, by grounding). Protect from sunlight. Avoid high temperatures.

10.5. Incompatible materials

No contact with: strong acids, strong bases and strong oxidants.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition may produce : Carbon monoxide. Other toxic gases.

SECTION 11: Toxicological information

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

Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified. (Based on available data, the classification criteria are not met)
xylene (1330-20-7)	
LD50 oral rat	3523 mg/kg rat
LD50 dermal rabbit	12126 mg/kg bodyweight Animal: rabbit, Animal sex: male
LC50 Inhalation - Rat	27124 mg/l
n-butyl acetate (123-86-4)	
LD50 oral rat	12.2 ml/kg Source: ECHA
LC50 Inhalation - Rat (Vapours)	> 4.9 mg/l Source: ECHA
ethylbenzene (100-41-4)	
LD50 oral rat	≈ 3500 mg/kg bodyweight Animal: rat
LD50 dermal rabbit	> 20000 mg/kg Source: ECHA
LC50 Inhalation - Rat [ppm]	4000 ppm Source: ECHA, Harmonized classification of EU CLP
2-methoxy-1-methylethyl acetate (108-65-6	i)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Reaction mass of Bis(1,2,2,6,6-pentameth) (1065336-91-5)	yl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate
LD50 oral rat	3230 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), 95% CL: 2615 - 4247
LD50 dermal rat	> 3170 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
2-hydroxyethyl methacrylate (868-77-9)	
LD50 oral rat	5564 mg/kg bodyweight Animal: rat, Guideline: other:
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Animal sex: male
n-butyl methacrylate (97-88-1)	
LD50 oral rat	16000 mg/kg

Safety Data Sheet

n-butyl methacrylate (97-88-1)	
LD50 dermal rabbit	11300 mg/kg
Skin corrosion/irritation	: Causes skin irritation.
n-butyl acetate (123-86-4)	
рН	6.2 Temp.: 20 °C Concentration: 5,3 g/L
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met)
n-butyl acetate (123-86-4)	
рН	6.2 Temp.: 20 °C Concentration: 5,3 g/L
Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity	 May cause an allergic skin reaction. Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met)
ethylbenzene (100-41-4)	
IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity STOT-single exposure	 Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met)
n-butyl acetate (123-86-4)	
STOT-single exposure	May cause drowsiness or dizziness.
n-butyl methacrylate (97-88-1)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
xylene (1330-20-7)	
LOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EPA OPP 82-1 (90-Day Oral Toxicity)
n-butyl acetate (123-86-4)	
LOAEL (oral, rat, 90 days)	500 mg/kg bodyweight Animal: rat, Guideline: EPA OTS 798.2650 (90-Day Oral Toxicity in Rodents)
NOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Guideline: EPA OTS 798.2650 (90-Day Oral Toxicity in Rodents)
ethylbenzene (100-41-4)	
NOAEL (oral, rat, 90 days)	75 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28- Day Oral Toxicity Study in Rodents)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
2-methoxy-1-methylethyl acetate (108-	65-6)
NOAEL (oral, rat, 90 days)	≥ 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEL (dermal, rat/rabbit, 90 days)	> 1000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
Reaction mass of Bis(1,2,2,6,6-pentam (1065336-91-5)	ethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate
NOAEL (oral, rat, 90 days)	300 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28- Day Oral Toxicity Study in Rodents), Guideline: EU Method B.7 (Repeated Dose (28 Days) Toxicity (Oral))

Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878

2-hydroxyethyl methacrylate (868-77-9)		
LOAEC (inhalation, rat, gas, 90 days)	350 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90- Day Study), Remarks on results: other:	
NOAEC (inhalation, rat, gas, 90 days)	100 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90- Day Study), Remarks on results: other:	
n-butyl methacrylate (97-88-1)		
LOAEC (inhalation, rat, gas, 90 days)	952 ppm Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28- Day Study)	
NOAEL (oral, rat, 90 days)	120 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90- Day Oral Toxicity Study in Rodents)	
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)	
n-butyl acetate (123-86-4)		
Viscosity, kinematic	0.83 mm ² /s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm ² /s)'	
Reaction mass of Bis(1,2,2,6,6-pentamet) (1065336-91-5)	hyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	
Viscosity, kinematic	478 mm ² /s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm ² /s)'	
n-butyl methacrylate (97-88-1)		
Viscosity, kinematic	1.06 mm²/s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm²/s)' Remarks on result: 'other:'	

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term	: Not classified (Based on available data, the classification criteria are not met)	
acute) Hazardous to the aquatic environment, long-term chronic)	: Harmful to aquatic life with long lasting effects.	
Not rapidly degradable		
xylene (1330-20-7)		
LC50 - Fish [1]	2.6 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)	
EC50 - Crustacea [1]	> 3.4 mg/l Test organisms (species): Ceriodaphnia dubia	
NOEC chronic fish	> 1.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'	
n-butyl acetate (123-86-4)		
LC50 - Fish [1]	18 mg/l Source: ECHA	
EC50 - Crustacea [1]	44 mg/l Source: ECHA	
EC50 - Other aquatic organisms [1]	32 mg/l Test organisms (species): Artemia salina	
EC50 72h - Algae [1]	674.7 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	
EC50 72h - Algae [2]	246 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
LOEC (chronic)	47.6 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	

Safety Data Sheet

n-butyl acetate (123-86-4)		
NOEC (chronic)	23.2 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
ethylbenzene (100-41-4)		
LC50 - Fish [1]	5.1 mg/l Test organisms (species): Menidia menidia	
EC50 72h - Algae [1]	5.4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
EC50 72h - Algae [2]	4.9 mg/l Test organisms (species): Skeletonema costatum	
EC50 96h - Algae [1]	3.6 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
EC50 96h - Algae [2]	7.7 mg/l Test organisms (species): Skeletonema costatum	
LOEC (chronic)	1.7 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'	
NOEC (chronic)	0.96 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'	
2-methoxy-1-methylethyl acetate (108-6	5-6)	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oryzias latipes	
EC50 - Crustacea [1]	> 500 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	 > 1000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) 	
NOEC (chronic)	≥ 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC chronic fish	47.5 mg/l Test organisms (species): Oryzias latipes Duration: '14 d'	
Reaction mass of Bis(1,2,2,6,6-pentame (1065336-91-5)	ethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	
LC50 - Fish [1]	0.9 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)	
EC50 72h - Algae [1]	1.68 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	
EC50 72h - Algae [2]	0.42 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	
2-hydroxyethyl methacrylate (868-77-9)		
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oryzias latipes	
EC50 - Crustacea [1]	380 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	836 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
EC50 72h - Algae [2]	345 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
LOEC (chronic)	49.6 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC (chronic)	24.1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
n-butyl methacrylate (97-88-1)		
LC50 - Fish [1]	11 mg/l Test organisms (species): Pimephales promelas	
LC50 - Fish [2]	5.57 mg/l Test organisms (species): Oryzias latipes	
EC50 - Crustacea [1]	32 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	31.2 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	

Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

n-butyl acetate (123-86-4)		
Partition coefficient n-octanol/water (Log Pow) 1.78 Source: HSDB		
ethylbenzene (100-41-4)		
Partition coefficient n-octanol/water (Log Pow) 3.15 Source: HSDB		
2-hydroxyethyl methacrylate (868-77-9)		
Partition coefficient n-octanol/water (Log Pow) 0.42 Source: ICSC		
n-butyl methacrylate (97-88-1)		
Partition coefficient n-octanol/water (Log Pow) 2.88		

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Do not discharge into drains.
Product/Packaging disposal recommendations	: This material and its container must be disposed of as hazardous waste. Do not dispose of with domestic waste. After cleaning, recycle or dispose of at an authorised site.
Additional information	: Flammable vapours may accumulate in the container.
European List of Waste (LoW) code	: 08 01 11* - waste paint and varnish containing organic solvents or other dangerous substances
	15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

ADR	IMDG IAT		
14.1. UN number or ID number			
UN 1866	UN 1866 UN 1866		
14.2. UN proper shipping name			
RESIN SOLUTION RESIN SOLUTION		Resin solution	

Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878

ADR	IMDG	ΙΑΤΑ	
Transport document description			
UN 1866 RESIN SOLUTION, 3, III, (D/E)	UN 1866 RESIN SOLUTION, 3, III (24°C c.c.)	UN 1866 Resin solution, 3, III	
14.3. Transport hazard class(es)			
3	3	3	
3			
14.4. Packing group			
III	III	III	
14.5. Environmental hazards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	
No supplementary information available	· · · ·		

14.6. Special precautions for user

Overland transport

Classification code (ADR) Limited quantities (ADR) Special packing provisions (ADR) Mixed packing provisions (ADR) Transport category (ADR) Special provisions for carriage - Packages (ADR)	:	F1 5I PP1 MP19 3 V12
Tunnel restriction code (ADR) EAC code		D/E •3Y
Transport by sea		
Special provisions (IMDG)	:	223, 955
Limited quantities (IMDG)	:	5 L
Special packing provisions (IMDG)	:	PP1
EmS-No. (Fire)	:	F-E
EmS-No. (Spillage)	:	S-E
Stowage category (IMDG)	:	А

Air transport

No data available

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Abbreviations and acronyms:			
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways		
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road		
ATE	Acute Toxicity Estimate		
BCF	Bioconcentration factor		
BLV	Biological limit value		
BOD	Biochemical oxygen demand (BOD)		
COD	Chemical oxygen demand (COD)		
DMEL	Derived Minimal Effect level		
DNEL	Derived-No Effect Level		
EC-No.	European Community number		
EC50	Median effective concentration		
EN	European Standard		
IARC	International Agency for Research on Cancer		
ΙΑΤΑ	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		
LC50	Median lethal concentration		
LD50	Median lethal dose		
LOAEL	Lowest Observed Adverse Effect Level		
NOAEC	No-Observed Adverse Effect Concentration		

Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878

Abbreviations and acronyms:			
NOAEL	No-Observed Adverse Effect Level		
NOEC	No-Observed Effect Concentration		
OECD	Organisation for Economic Co-operation and Development		
OEL	Occupational Exposure Limit		
PBT	Persistent Bioaccumulative Toxic		
PNEC	Predicted No-Effect Concentration		
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail		
SDS	Safety Data Sheet		
STP	Sewage treatment plant		
ThOD	Theoretical oxygen demand (ThOD)		
TLM	Median Tolerance Limit		
VOC	Volatile Organic Compounds		
CAS-No.	Chemical Abstract Service number		
N.O.S.	Not Otherwise Specified		
vPvB	Very Persistent and Very Bioaccumulative		
ED	Endocrine disrupting properties		

Data sources Training advice : ECHA (European Chemicals Agency).

: Handle in accordance with good industrial hygiene and safety procedures.

Full text of H- and EUH-statements:			
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4		
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4		
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1		
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1		
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3		
Asp. Tox. 1	Aspiration hazard, Category 1		
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2		
Flam. Liq. 2	Flammable liquids, Category 2		
Flam. Liq. 3	Flammable liquids, Category 3		
H225	Highly flammable liquid and vapour.		
H226	Flammable liquid and vapour.		
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.		

Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878

Full text of H- and EUH-statements:			
H361f	Suspected of damaging fertility.		
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.		
H412	Harmful to aquatic life with long lasting effects.		
Repr. 2	Reproductive toxicity, Category 2		
Skin Irrit. 2	Skin corrosion/irritation, Category 2		
Skin Sens. 1	Skin sensitisation, Category 1		
Skin Sens. 1A	Skin sensitisation, category 1A		
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2		
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis		

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:			
Flam. Liq. 3	H226	Expert judgment	
Skin Irrit. 2	H315	Expert judgment	
Skin Sens. 1	H317	Calculation method	
Aquatic Chronic 3	H412	Calculation method	

Safety Data Sheet (SDS), EU

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