

Safety data sheet

(EC) 1907/2006 (REACH), Annex II, as amended by Regulation (EU) 2021/848

Date of revision: 01.09.2022
Date of previous issue: 08.12.2020
Version number 4 (replaces version 3)

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

- **1.1 Product identifier**
- **Trade name: Norecyl 50 Comp. A**
- **UFI: T1Y6-W03N-100X-4HP1**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** Coating
- **Application of the substance / the mixture**
2-comp. acrylic epoxy paint, Comp. A
Uses in Coatings - Industrial use
Uses in Coatings - Professional use
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Nor-Maali Oy
Vanhatie 20, 15240 Lahti, FINLAND
- **Further information obtainable from:** MSDS (Nor-Maali Oy) tel.+358 3 874 650, sds@nor-maali.fi
- **1.4 Emergency telephone number:** Contact National Poison Center

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

Product definition: mixture

· **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the GB CLP regulation.

· **Hazard pictograms**



GHS02



GHS05



GHS07



GHS09

· **Signal word** Danger

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Hazard-determining components of labelling:

butan-1-ol
 Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidylsebacate
 maleic anhydride

Hazard statements

H226 Flammable liquid and vapour.
 H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H317 May cause an allergic skin reaction.
 H411 Toxic 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.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/doctor.
 P403+P235 Store in a well-ventilated place. Keep cool.

Additional information:

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

Determination of endocrine-disrupting properties

78-93-3	butanone	List II
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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119488216-32-	xylene Flam. Liq. 3, H226; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	2.5 - 10%
CAS: 71-36-3 EINECS: 200-751-6 Reg.nr.: 01-2119484630-38-	butan-1-ol Flam. Liq. 3, H226; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335-H336	2.5 - 10%
CAS: 78-93-3 EINECS: 201-159-0 Reg.nr.: 01-2119457290-43-	butanone Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	2.5 - 10%
CAS: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-29-	n-butyl acetate Flam. Liq. 3, H226; STOT SE 3, H336, EUH066	2.5 - 10%
CAS: 7779-90-0 EINECS: 231-944-3 Reg.nr.: 01-2119485044-40-	trizinc bis(orthophosphate) Aquatic Acute 1, H400; Aquatic Chronic 1, H410	1 - 2.5%
CAS: 100-41-4 EINECS: 202-849-4 Reg.nr.: 01-2119489370-35-	ethylbenzene Flam. Liq. 2, H225; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H332	1 - 2.5%
CAS: 220926-97-6 ELINCS: 432-840-2 Reg.nr.: 01-0000017900-73-	12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine Acute Tox. 4, H332; Aquatic Chronic 4, H413	1 - 2.5%
CAS: 108-65-6 EINECS: 203-603-9 Reg.nr.: 01-2119475791-29-	2-methoxy-1-methylethyl acetate Flam. Liq. 3, H226	1 - 2.5%

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CAS: 1065336-91-5 EC number: 915-687-0 Reg.nr.: 01-2119491304-40-	Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidylsebacate Repr. 2, H361f; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1A, H317	< 0.7%
CAS: 1314-13-2 EINECS: 215-222-5 Reg.nr.: 01-2119463881-32-	zinc oxide Aquatic Acute 1, H400; Aquatic Chronic 1, H410	< 0.7%
CAS: 108-88-3 EINECS: 203-625-9 Reg.nr.: 01-2119471310-51-	toluene Flam. Liq. 2, H225; Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336	< 0.3%
CAS: 108-31-6 EINECS: 203-571-6 Reg.nr.: 01-2119472428-31	maleic anhydride Resp. Sens. 1, H334; STOT RE 1, H372; Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Sens. 1A, H317 Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0.001 %	< 0.0006%

Additional information:

Contains: > 1 % TiO₂ (<10 µm)
 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:

Never give anything by mouth or induce vomiting to an unconscious person or a person who has convulsions.

After inhalation:

Remove person exposed to excessive solvent concentrations to fresh air, keep patient warm and at rest. If breathing is irregular, call national emergency number, if needed start giving artificial respiration and seek medical advice.

After skin contact:

Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

After eye contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.

After swallowing:

If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do not induce vomiting.

Information for doctor: Treatment according to symptoms.

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: Alcohol resistant foam, CO₂, powders, water spray.

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

Evacuate people from danger area and deny access to area. Remove containers from danger area and try to cool containers which cannot be removed safely. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Protective equipment: Compressed air respirator and protective clothing.

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SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
 No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- **6.2 Environmental precautions:**
 Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
- **6.3 Methods and material for containment and cleaning up:**
 Absorb liquid components with liquid-binding material (sand, peat or other absorbent material). 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**
 Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, earth drum and connect to receiving container with bonding strap. Operators should wear antistatic footwear and clothing and floors should be of the conducting type. Keep container tightly closed. Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this preparation. Avoid inhalation of dust from sanding. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see section 8). Never use pressure to empty. Container is not a pressure vessel. Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws.
 When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.
- **Information about fire - and explosion protection:**
 Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
 Store in accordance with local regulations. Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. Keep away from: oxidising agents, strong alkalis, strong acids. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not empty into drains.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **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:**

1330-20-7 xylene	
HTP	Short-term value: 440 mg/m ³ , 100 ppm Long-term value: 220 mg/m ³ , 50 ppm Sk; BMGV

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71-36-3 butan-1-ol	
HTP	Short-term value: 230 mg/m ³ , 75 ppm Long-term value: 150 mg/m ³ , 50 ppm Skin
78-93-3 butanone	
HTP	Short-term value: 300 mg/m ³ , 100 ppm Long-term value: 60 mg/m ³ , 20 ppm skin
123-86-4 n-butyl acetate	
HTP	Short-term value: 725 mg/m ³ , 150 ppm Long-term value: 240 mg/m ³ , 50 ppm
100-41-4 ethylbenzene	
HTP	Short-term value: 880 mg/m ³ , 200 ppm Long-term value: 220 mg/m ³ , 50 ppm Sk; BMGV
108-65-6 2-methoxy-1-methylethyl acetate	
HTP	Short-term value: 550 mg/m ³ , 100 ppm Long-term value: 270 mg/m ³ , 50 ppm skin
108-88-3 toluene	
HTP	Short-term value: 380 mg/m ³ , 100 ppm Long-term value: 81 mg/m ³ , 50 ppm Sk, Noise
108-31-6 maleic anhydride	
HTP	Long-term value: 0.41 mg/m ³ , 0.1 ppm Ceiling limit m ³ , 0.2 ppm
	: 0.81 mg/

· DNELs

1330-20-7 xylene	
Dermal	DNEL 180 mg/kg bw/day (Workers - Long-term systemic effects)
Inhalative	DNEL 211 mg/m ³ (Workers - Long-term systemic effects)
71-36-3 butan-1-ol	
Inhalative	DNEL 310 mg/m ³ (Workers - Long-term local effects)
78-93-3 butanone	
Dermal	DNEL 1,161 mg/kg bw/day (Workers - Long-term systemic effects)
Inhalative	DNEL 600 mg/m ³ (Workers - Long-term systemic effects)
123-86-4 n-butyl acetate	
Dermal	DNEL 7 mg/kg bw/day (Workers - Long-term systemic effects)
Inhalative	DNEL 480 mg/m ³ (Workers - Long-term systemic effects)
7779-90-0 trizinc bis(orthophosphate)	
Dermal	DNEL 83 mg/kg bw/day (Workers - Long-term systemic effects)
Inhalative	DNEL 5 mg/m ³ (Workers - Long-term systemic effects)
100-41-4 ethylbenzene	
Dermal	DNEL 180 mg/kg bw/day (Workers - Long-term systemic effects)
Inhalative	DNEL 77 mg/m ³ (Workers - Long-term systemic effects) 442 mg/m ³ (Workers - Long-term local effects)
220926-97-6 12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	
Inhalative	DNEL 0.332 mg/m ³ (Workers - Long-term local effects)
108-65-6 2-methoxy-1-methylethyl acetate	
Dermal	DNEL 796 mg/kg bw/day (Workers - Long-term systemic effects)
Inhalative	DNEL 275 mg/m ³ (Workers - Long-term systemic effects)

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1065336-91-5 Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidylsebacate		
Dermal	DNEL	1.8 mg/kg bw/day (Workers - Long-term systemic effects)
Inhalative	DNEL	1.27 mg/m3 (Workers - Long-term systemic effects)
1314-13-2 zinc oxide		
Dermal	DNEL	83 mg/kg bw/day (Workers - Long-term systemic effects)
Inhalative	DNEL	5 mg/m3 (Workers - Long-term systemic effects)
108-88-3 toluene		
Dermal	DNEL	384 mg/kg bw/day (Workers - Long-term systemic effects)
Inhalative	DNEL	192 mg/m3 (Workers - Long-term systemic effects) 384 mg/m3 (Workers - acute systemic effects)
108-31-6 maleic anhydride		
Dermal	DNEL	0.2 mg/kg bw/day (Workers - Long-term systemic effects)
Inhalative	DNEL	0.081 mg/m3 (Workers - Long-term systemic effects)
· PNECs		
1330-20-7 xylene		
PNEC	6.58 mg/L (Sewage treatment)	
PNEC	12.46 mg/kg dwt (Fresh water sediment)	
	12.46 mg/kg dwt (Marine water sediment)	
	2.31 mg/kg dwt (Soil)	
PNEC	2.31 mg/kg (Soil)	
PNEC	327 µg/L (Freshwater)	
	327 µg/L (Marine water)	
71-36-3 butan-1-ol		
PNEC	0.082 mg/L (Freshwater)	
	0.0082 mg/L (Marine water)	
	2,476 mg/L (Sewage treatment)	
PNEC	0.324 mg/kg dwt (Fresh water sediment)	
	0.0324 mg/kg dwt (Marine water sediment)	
PNEC	0.0166 mg/kg (Soil)	
PNEC	82 µg/L (Freshwater)	
	8.2 µg/L (Marine water)	
78-93-3 butanone		
PNEC	55.8 mg/L (Freshwater)	
	55.8 mg/L (Marine water)	
	709 mg/L (Sewage treatment)	
PNEC	284.74 mg/kg dwt (Fresh water sediment)	
	284.7 mg/kg dwt (Marine water sediment)	
PNEC	1,000 mg/kg (Secondary Poisoning)	
	22.5 mg/kg (Soil)	
123-86-4 n-butyl acetate		
PNEC	0.18 mg/L (Freshwater)	
	0.018 mg/L (Marine water)	
	35.6 mg/L (Sewage treatment)	
PNEC	0.981 mg/kg dwt (Fresh water sediment)	
	0.0981 mg/kg dwt (Marine water sediment)	
	0.0903 mg/kg dwt (Soil)	
7779-90-0 trizinc bis(orthophosphate)		
PNEC	117.8 mg/kg dwt (Fresh water sediment)	
	56.5 mg/kg dwt (Marine water sediment)	

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PNEC	35.6 mg/kg dwt (Soil) 20 µg/L (Freshwater) 6.1 µg/L (Marine water) 100 µg/L (Sewage treatment)
100-41-4 ethylbenzene	
PNEC	0.1 mg/L (Freshwater) 0.01 - 0.1 mg/L (Marine water) 9.6 mg/L (Sewage treatment)
PNEC	13.7 mg/kg dwt (Fresh water sediment) 1.37 mg/kg dwt (Marine water sediment) 2.68 mg/kg dwt (Soil)
PNEC	20 mg/kg (Secondary Poisoning)
108-65-6 2-methoxy-1-methylethyl acetate	
PNEC	0.635 mg/L (Freshwater) 0.0635 mg/L (Marine water) 100 mg/L (Sewage treatment)
PNEC	3.29 mg/kg dwt (Fresh water sediment) 0.329 mg/kg dwt (Marine water sediment)
PNEC	0.29 mg/kg (Soil)
1065336-91-5 Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidylsebacate	
PNEC	1 mg/L (Sewage treatment)
PNEC	1.05 mg/kg dwt (Fresh water sediment) 0.11 mg/kg dwt (Marine water sediment)
PNEC	0.21 mg/kg (Soil)
PNEC	2.2 µg/L (Freshwater) 0.22 µg/L (Marine water)
1314-13-2 zinc oxide	
PNEC	117.8 mg/kg dwt (Fresh water sediment) 56.5 mg/kg dwt (Marine water sediment)
PNEC	35.6 mg/kg (Soil)
PNEC	20.6 µg/L (Freshwater) 6.1 µg/L (Marine water) 100 µg/L (Sewage treatment)
108-88-3 toluene	
PNEC	1.78 - 16.39 mg/kg dwt (Fresh water sediment) 0.178 - 16.39 mg/kg dwt (Marine water sediment)
PNEC	0.313 - 2.89 mg/kg (Soil)
PNEC	74 - 680 µg/L (Freshwater) 7.4 - 680 µg/L (Marine water) 840 - 13,610 µg/L (Sewage treatment)
108-31-6 maleic anhydride	
PNEC	0.0379 - 0.075 mg/L (Freshwater) 0.00379 - 0.0075 mg/L (Marine water) 4.46 - 44.6 mg/L (Sewage treatment)
PNEC	0.06 - 0.296 mg/kg dwt (Fresh water sediment) 0.006 - 0.0296 mg/kg dwt (Marine water sediment)
PNEC	6.67 mg/kg (Secondary Poisoning) 0.01 - 0.0369 mg/kg (Soil)

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Ingredients with biological limit values:	
1330-20-7 xylene	
BMGV	5.0 mmol/l creatinine Sampling time: post shift Parameter: methyl hippuric acid of urine
100-41-4 ethylbenzene	
BMGV	5.2 mmol/l creatinine Sampling time: post shift after working week or exposure period Parameter: mandelic acid of urine
108-88-3 toluene	
BMGV	500 nmol/l Sampling time: Morning after working day Parameter: blood's amount of toluene

Additional information:

The information is based on the valid lists at the time of manufacture (Finland 654/2020).

8.2 Exposure controls

Appropriate engineering controls No further data; see item 7.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the HTP, suitable respiratory protection must be worn.

Respiratory protection:

If ventilation is insufficient or if workers are exposed to concentrations above the exposure limit they must use half- or full mask with gas filter A (brown, organic substances), and when grinding P2 (Ib) -type dust filter. Mask with combined filter (gas & dust) A2-P2 must be used when spraying. In the continuous long-term work it is recommended to use motored air protector or separative protector (fresh air hood or compressed air hood or such).

Hand protection



Protective gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

Wear suitable gloves tested to EN374.

May be used, gloves(breakthrough time) 4 - 8 hours: butyl rubber, nitrile rubber

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection



Tightly sealed goggles

Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical state

Fluid

Colour:

Colourful

Odour:

Strong

Odour threshold:

Not determined.

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· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	137 - 143 °C (1330-20-7 xylene)
· Flammability	Not applicable.
· Lower and upper explosion limit	
· Lower:	1 vol-%
· Upper:	11 vol-%
· Flash point:	24 °C
· Ignition temperature:	500 °C (1330-20-7 xylene)
· Decomposition temperature:	Not determined.
· pH	Not determined.
· Viscosity:	
· Kinematic viscosity at 40 °C	> 20.5 mm ² /s
· Dynamic:	Not determined.
· Solubility	
· water:	Not miscible or difficult to mix.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not determined.
· Density and/or relative density	
· Density at 20 °C:	1.4 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.	
· Auto-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 specific test data related to reactivity available for this product or its ingredients.

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- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
In confined or poorly ventilated spaces solvent may form an explosive mixture with air.
- **10.3 Possibility of hazardous reactions**
Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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:**

1330-20-7 xylene

Oral	LD50	> 3,253 mg/kg (rat)
Dermal	LD50	12,126 mg/kg (rabbit)
Inhalative	LC50/4 h	27.124 mg/l (rat)

71-36-3 butan-1-ol

Oral	LD50	2,292 mg/kg (rat)
Dermal	LD50	3,430 mg/kg (rabbit)

78-93-3 butanone

Oral	LD50	> 2,000 mg/kg (rat)
Dermal	LD50	> 5,000 mg/kg (rabbit)

123-86-4 n-butyl acetate

Oral	LD50	10,760 mg/kg (rat) (OECD 423)
Dermal	LD50	> 14,112 mg/kg (rabbit) (OECD 402)
Inhalative	LC50/4 h	23.4 mg/l (rat) (OECD 403)

7779-90-0 trizinc bis(orthophosphate)

Oral	LD50	> 5,000 mg/kg (rat)
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100-41-4 ethylbenzene

Oral	LD50	> 3,500 mg/kg (rat)
Dermal	LD50	> 15,400 mg/kg (rabbit)
Inhalative	LC50/4 h	> 17.629 mg/l (rat)

220926-97-6 12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine

Oral	LD50	> 2,000 mg/kg (rat)
Dermal	LD50	> 2,000 mg/kg (rat)
Inhalative	LC50/4 h	3.56 mg/l (rat)

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

Oral	LD50	6,190 mg/kg (rat)
Dermal	LD50	> 2,000 mg/kg (rat)

1065336-91-5 Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidylsebacate

Oral	LD50	3,230 mg/kg (rat)
Dermal	LD50	3,170 mg/kg (rat)

1314-13-2 zinc oxide

Oral	LD50	> 5,000 mg/kg (rat)
Dermal	LD50	> 2,000 mg/kg (rat)
Inhalative	LC50/4 h	5,700 mg/l (rat)

(Contd. on page 11)

Trade name: Norecyl 50 Comp. A

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108-88-3 toluene		
Oral	LD50	> 5,000 mg/kg (rat)
Dermal	LD50	> 5,000 mg/kg (rabbit)
Inhalative	LC50/4 h	> 384 mg/l (rat)
108-31-6 maleic anhydride		
Oral	LD50	1,090 mg/kg (rat)
Dermal	LD50	2,620 mg/kg (rabbit)

- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **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.
- **Other information (about experimental toxicology):**
Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Swallowing may cause nausea, diarrhea, vomiting, gastro-intestinal irritation and chemical pneumonia.
- **Additional toxicological information:**
- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
Ethylbenzene may cause cancer to humans (carcinogenic, group 2B, IARC), but information available is insufficient for satisfactory estimate.
- **11.2 Information on other hazards**

· Endocrine disrupting properties		
78-93-3	butanone	List II

SECTION 12: Ecological information

· **12.1 Toxicity**

· Aquatic toxicity:	
1330-20-7 xylene	
48-h EC50	165 mg/L (Daphnia magna)
96-h LC50	26.7 mg/L (Pimephales promelas)
48-h LC50	86 mg/L (Leuciscus idus melanotus)
71-36-3 butan-1-ol	
48-h EC50	1,328 mg/L (Daphnia magna)
96-h LC50	1,376 mg/L (Fish)
96-h EC50	225 mg/L (Algae)
78-93-3 butanone	
48-h EC50	308 - 5,091 mg/L (Daphnia magna)
96-h LC50	2.993 - 3.2 mg/L (Fish)
96-h EC50	2,029 mg/L (Algae)
123-86-4 n-butyl acetate	
72-h EC50	647.7 mg/L (Desmodesmus subspicatus)

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Safety data sheet
(EC) 1907/2006 (REACH), Annex II, as amended by Regulation
(EU) 2021/848

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Trade name: Norecryl 50 Comp. A

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48-h EC50	44 mg/L (Daphnia magna)
96-h LC50	18 mg/L (Pimephales promelas) (OECD 203)
NOEC	200 mg/L (Desmodesmus subspicatus)
7779-90-0 trizinc bis(orthophosphate)	
48-h EC50	> 2.34 mg/L (Daphnia magna)
96-h LC50	0.112 - 2.92 mg/L (Fish)
72-h IC50	0.136 - 0.15 mg/L (Algae)
100-41-4 ethylbenzene	
48-h EC50	7.2 mg/L (Daphnia magna)
96-h LC50	4.2 mg/L (Oncorhynchus mykiss)
220926-97-6 12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine	
72-h EC50	> 100 mg/L (Pseudokirchneriella subcapitata) (OECD 201)
48-h EC50	> 100 mg/L (Daphnia magna) (OECD 202)
96-h LC50	> 100 mg/L (Oncorhynchus mykiss) (OECD 203)
108-65-6 2-methoxy-1-methylethyl acetate	
48-h EC50	500 mg/L (Daphnia magna)
96-h LC50	100 - 180 mg/L (Fish)
96-h EC50	1,000 mg/L (Algae)
1065336-91-5 Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidylsebacate	
72-h EC50	0.42 - 1.68 mg/L (Algae)
96-h LC50	0.96 mg/L (Fish)
1314-13-2 zinc oxide	
96-h EC50	0.3 - 1.94 mg/L (Algae)
48-h EC50	155 - 100,000 ppm (Daphnia magna)
96-h LC50	112 - 8,062 ppm (Fish)
108-88-3 toluene	
96-h LC50	5.5 mg/L (Fish)
48-h LC50	3.78 mg/L (Daphnia magna)
108-31-6 maleic anhydride	
72-h EC50	65.78 - 150 mg/L (Algae)
48-h EC50	42.81 - 330 mg/L (Daphnia magna)
96-h LC50	75 mg/L (Fish)

• **12.2 Persistence and degradability**

Biodegradation:

Xylene: readily

n-butyl acetate: 90 %, 28 d -> readily

Trizinc bis(orthophosphate): not readily

Ethylbenzene: readily

2-methoxy-1-methylethyl acetate: readily

zinc oxide: not readily

Toluene: readily

• **12.3 Bioaccumulative potential**

Xylene: LogPow = 3,12 (low)

Ethylbenzene: LogPow = 3,15 (low)

Toluene: LogPow = 2,73 (low)

• **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** For information on endocrine disrupting properties see section 11.

(Contd. on page 13)

Trade name: Norecryn 50 Comp. A

- 12.7 Other adverse effects
- Remark: Toxic for fish

(Contd. of page 12)

SECTION 13: Disposal considerations



- 13.1 Waste treatment methods
- Recommendation
 Do not allow to enter drains or watercourses. Material and/or container must be disposed of as hazardous waste.

· European waste catalogue

08 01 11* waste paint and varnish containing organic solvents or other hazardous substances

- Uncleaned packaging:
- Recommendation:
 Empty, dry paint containers (hole made to the bottom) should be taken to collection centres for metallic paint packages. If this collecting/recycling centre doesn't exist, containers can be taken to a local dump pit. For more information contact your local waste disposal authorities or paint deliverer.

SECTION 14: Transport information

<ul style="list-style-type: none"> · 14.1 UN number or ID number · ADR, IMDG, IATA 	UN1263
<ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR · IMDG · IATA 	PAINT, ENVIRONMENTALLY HAZARDOUS PAINT, MARINE POLLUTANT Marine Pollutant Material: trizinc bis(orthophosphate), zinc oxide PAINT
<ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR, IMDG 	
<ul style="list-style-type: none"> · Class 	3 Flammable liquids.
<ul style="list-style-type: none"> · IATA 	
<ul style="list-style-type: none"> · Class 	3 Flammable liquids.
<ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG, IATA 	III
<ul style="list-style-type: none"> · 14.5 Environmental hazards: · Special marking (ADR): 	Product contains environmentally hazardous substances: Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidylsebacate The environmental hazardous mark is only applicable for packages containing more than 5 litres of liquids. Symbol (fish and tree)
<ul style="list-style-type: none"> · 14.6 Special precautions for user · Hazard identification number (Kemler code): · EMS Number: 	Warning: Flammable liquids. 30 F-E,S-E

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Trade name: Norecyl 50 Comp. A

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· Stowage Category	A
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5L
· Transport category	3
· Tunnel restriction code	D/E
· IMDG	
· Limited quantities (LQ)	5L
· 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**
 FLAMMABLE LIQUIDS
 E2 Hazardous to the Aquatic Environment
 P5c FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 48

· **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**

78-93-3	butanone	3
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**

78-93-3	butanone	3
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.

· **Relevant phrases**

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.

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Trade name: Norecyl 50 Comp. A

(Contd. of page 14)

- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H361d Suspected of damaging the unborn child.
- H361f Suspected of damaging fertility.
- H372 Causes damage to organs through prolonged or repeated exposure.
- 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.
- H413 May cause long lasting harmful effects to aquatic life.
- EUH066 Repeated exposure may cause skin dryness or cracking.

• **Contact:** Nor-Maali Oy, tel. +358 3 874 650 or sds@nor-maali.fi

• **Date of previous version:** 08.12.2020

• **Version number of previous version:** 3

• **Abbreviations and acronyms:**

- Flam. Liq. 2: Flammable liquids – Category 2
- Flam. Liq. 3: Flammable liquids – Category 3
- Acute Tox. 4: Acute toxicity – Category 4
- Skin Corr. 1B: Skin corrosion/irritation – Category 1B
- 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
- Repr. 2: Reproductive toxicity – Category 2
- Repr. 2: Reproductive toxicity – Category 2
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
- 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
- Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4

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