



**Safety Data Sheet**  
**according to Regulation (EC)**  
**No. 2020/878**

**SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking**

<b>1.1 Product Identifier</b>	B0330908	<b>Revision Date:</b>	07/06/2023
<b>Product Name:</b>	CARBOGUARD E-19 SEALER PART B	<b>Supersedes Date:</b>	20/01/2023
		<b>Version Number:</b>	2
<b>UFI Code:</b>	MSR3-N090-J002-FVT6		
<b>Nano Form:</b>	No		
<b>1.2 Relevant identified uses of the substance or mixture and uses advised against</b>	Hardener for 2 components coatings - Industrial use. Advised against: others than recommended		
<b>Product to be mixed with:</b>	CARBOGUARD E-19 SEALER PART A		
<b>Mixing ratio by volume Part A/ Part B:</b>	2:1		
<b>1.3 Details of the supplier of the safety data sheet</b>			
<b>Manufacturer:</b>	Carboline Norge AS Postboks 593 3412 Lierstranda Norway		
	Regulatory / Technical Information: +47 32 85 73 00 +47 32 85 74 00		
<b>Datasheet Produced by:</b>	Tarka, Malgorzata - hms@carboline.com		
<b>1.4 Emergency telephone number:</b>	CHEMTREC +1 703 5273887 (Outside US) 112 (24/7) Croatia +3851 2348 342 (24/7 in Croatian and English) Iceland 112 (24/7) Malta 112 (24/7)		

**SECTION 2: Hazards Identification**

**2.1 Classification of the substance or mixture**

Classification according to Classification, Labeling & Packaging Regulation (EC) 1272/2008

**HAZARD STATEMENTS**

Flammable Liquid, category 3

H226

Skin Irritation, category 2	H315
Skin Sensitizer, category 1	H317
Serious Eye Damage, category 1	H318
Acute Toxicity, Inhalation, category 4	H332
STOT, single exposure, category 3, RTI	H335
STOT, single exposure, category 3, NE	H336
STOT, repeated exposure, category 2	H373
Hazardous to the aquatic environment, Chronic, category 3	H412

## 2.2 Label elements

### Symbol(s) of Product



### Signal Word

Danger

### Named Chemicals on Label

Butan-1-ol, 2-methylpropan-1-ol, 2,4,6-tris(dimethylaminomethyl)phenol, ethylbenzene, xylene, benzene-1,3-dimethanamine, 3-Aminomethyl-3,5,5-trimethylcyclohexylamine, Fatty acids, tall-oil, reaction products with bis-A, epichlorohydrin, glycidyl tolyl ether and TETA

### HAZARD STATEMENTS

Flammable Liquid, category 3	H226	Flammable liquid and vapour.
Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Serious Eye Damage, category 1	H318	Causes serious eye damage.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.
STOT, single exposure, category 3, NE	H336	May cause drowsiness or dizziness.
STOT, repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment, Chronic, category 3	H412	Harmful to aquatic life with long lasting effects.

### PRECAUTION PHRASES

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.

### ADDITIONAL INFORMATION

ADD-04	Due to the viscosity, this product does not present an aspiration hazard.
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## 2.3 Other hazards

No Information

### Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/vPvB in accordance with Annex XIII.

**Endocrine disrupting properties - Toxicity**

Based on the available data, the product does not contain substances identified as having endocrine disrupting properties according to Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentration of 0,1% or higher.

**Endocrine disrupting properties - Ecotoxicity**

Based on the available data, the product does not contain substances identified as having endocrine disrupting properties according to Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentration of 0,1% or higher.

**SECTION 3: Composition/Information On Ingredients****3.1 Substances**

Not applicable

**3.2 Mixtures****Hazardous ingredients**

<u>Name According to EEC</u> <u>EINECS No.</u> <u>CAS-No.</u> <u>REACH Reg No.</u>	<u>%</u>	<u>Classifications</u>	<u>SCL Value</u> <u>ATE Value</u> <u>M-Factor</u>
xylene 215-535-7 1330-20-7 01-2119488216-32	25 - <50	H226-304-312-315-319-332-335-373-412 Acute Tox. 4 Dermal, Acute Tox. 4 Inhalation, Aquatic Chronic 3, Asp. Tox. 1, Eye Irrit. 2, Flam. Liq. 3, Skin Irrit. 2, STOT RE 2, STOT SE 3 RTI	<b>SCL:</b> -  <b>ATE:</b> -  <b>M-Factor:</b> -
2-methylpropan-1-ol 201-148-0 78-83-1 01-2119484609-23	10 - <25	H226-315-318-332-335-336 Acute Tox. 4 Inhalation, Eye Dam. 1, Flam. Liq. 3, Skin Irrit. 2, STOT SE 3 NE, STOT SE 3 RTI	<b>SCL:</b> -  <b>ATE:</b> -  <b>M-Factor:</b> -
ethylbenzene 202-849-4 100-41-4 01-2119489370-35	10 - <25	H225-304-332-373-412 Acute Tox. 4 Inhalation, Aquatic Chronic 3, Asp. Tox. 1, Flam. Liq. 2, STOT RE 2	<b>SCL:</b> -  <b>ATE:</b> -  <b>M-Factor:</b> -

Butan-1-ol 200-751-6 71-36-3 01-2119484630-38	1.0 - <2.5	H226-302-315-318-335-336 Acute Tox. 4 Oral, Eye Dam. 1, Flam. Liq. 3, Skin Irrit. 2, STOT SE 3 NE, STOT SE 3 RTI	<b>SCL:</b>	-
			<b>ATE:</b>	-
			<b>M-Factor:</b>	-
Fatty acids, tall-oil, reaction products with bis-A, epichlorohydrin, glycidyl tolyl ether and TETA 606-078-8 186321-96-0 01-2119983521-35	1.0 - <2.5	H315-317-318-400-410 Aquatic Acute 1, Aquatic Chronic 1, Eye Dam. 1, Skin Irrit. 2, Skin Sens. 1	<b>SCL:</b>	-
			<b>ATE:</b>	-
			<b>M-Factor:</b>	-
2,4,6-tris(dimethylaminomethyl) phenol 202-013-9 90-72-2 01-2119560597-27	1.0 - <2.5	H302-314-318 Acute Tox. 4 Oral, Eye Dam. 1, Skin Corr. 1C	<b>SCL:</b>	-
			<b>ATE:</b>	2 169 mg/kg (oral)
			<b>M-Factor:</b>	-
3-Aminomethyl-3,5,5- trimethylcyclohexylamine 220-666-8 2855-13-2 01-2119514687-32	0.1 - <1.0	H302-312-314-317 Acute Tox. 4 Dermal, Acute Tox. 4 Oral, Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1A	<b>SCL:</b>	H317 ≥ 0.001 %
			<b>ATE:</b>	1030 mg/kg (oral); >5.01 m/ L (inh.); >2000 mg/L (derm.)
			<b>M-Factor:</b>	1
benzene-1,3-dimethanamine 216-032-5 1477-55-0 01-2119480150-50	0.1 - <1.0	H302-314-317-332-412 Acute Tox. 4 Inhalation, Acute Tox. 4 Oral, Aquatic Chronic 3, Corr. Resp., Skin Corr. 1B, Skin Sens. 1B	<b>SCL:</b>	-
			<b>ATE:</b>	-
			<b>M-Factor:</b>	-

phenol, styrenated 262-975-0 61788-44-1 01-2119980970-27	0.1 - <1.0	H315-317-411 Aquatic Chronic 2, Skin Irrit. 2, Skin Sens. 1	<b>SCL:</b>  <b>ATE:</b>  <b>M-Factor:</b>	-  -  -
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**Additional Information:** The text for CLP Hazard Statements shown above (if any) is given in Section 16.

## SECTION 4: First-aid Measures

### 4.1 Description of First Aid Measures

**GENERAL NOTES:** Show this safety data sheet to the doctor in attendance.

**AFTER INHALATION:** Move to fresh air. Give oxygen or artificial respiration if needed. When risk of unconsciousness, place and transport the victim in secured recovery position. Provide fresh air, rest and warmth. Call a physician immediately.

**AFTER SKIN CONTACT:** Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. Do not use solvent or thinners to clean skin.

**AFTER EYE CONTACT:** Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses.

**AFTER INGESTION:** Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously: Keep head below hips to prevent aspiration of stomach vomit into lungs. Provide fresh air, rest and warmth.

#### Self protection of the first aider:

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

### 4.2 Most important symptoms and effects, both acute and delayed

Harmful by inhalation. May cause sensitization by skin contact. Danger of serious damage to health by prolonged exposure. Vapours may cause drowsiness and dizziness. Causes serious eye damage.

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

Treat symptomatically.

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

When symptoms persist or in all cases of doubt seek medical advice.

## SECTION 5: Firefighting Measures

### 5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam

**FOR SAFETY REASONS NOT TO BE USED:** Alcohol, Alcohol based solutions, any other media not listed above. Do not use a solid water stream as it may scatter and spread fire.

### 5.2 Special hazards arising from the substance or mixture

Heating or fire conditions liberates toxic gas. Flash back possible over considerable distance. As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Vapours may form explosive mixtures with air. Solvent vapours are heavier than air and may spread along floors and ignite.

### 5.3 Advice for firefighters

Fire will produce dense black smoke containing hazardous combustion products (see section 10). In the event of fire, wear self-contained breathing apparatus. Collect contaminated fire extinguishing water separately. This must not be discharged into

drains. Keep containers and surroundings cool with water spray.

## SECTION 6: Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### 6.1.1 For non-emergency personnel

Ensure adequate ventilation. Use personal protective equipment. Remove all sources of ignition.

#### 6.1.2 For emergency responders

See Section 7, 8 and 10 for further information.

### 6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

### 6.3 Methods and material for containment and cleaning up

Do not let product enter drains. Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Clean with detergents. Avoid solvents.

### 6.4 Reference to other sections

Please refer to EU disposal requirements or country specific disposal requirements for this material. See Section 8 and 13 for further information.

## SECTION 7: Handling and Storage

### 7.1 Precautions for safe handling

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Electrical equipment should be protected to the appropriate standard. Preparation may charge electrostatically: always use earthing leads when transferring from one container to another. Use only in area provided with appropriate exhaust ventilation. Provide sufficient air exchange and/or exhaust in work rooms. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment. Open drum carefully as content may be under pressure. Do not breathe vapours or spray mist. Use only explosion-proof equipment. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is being used. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

### 7.2 Conditions for safe storage, including any incompatibilities

**CONDITIONS TO AVOID:** Avoid heat, sparks, flames and other ignition sources.

**STORAGE CONDITIONS:** Store in original container. Keep locked up or in an area accessible only to qualified or authorised persons. Keep container closed. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Store in upright position only. Storage of flammable liquids. Store away from: oxidising materials, acids, and alkalis.

### 7.3 Specific end use(s)

The mixing and application to be in accordance with the technical data sheets.

## SECTION 8: Exposure Controls/Personal Protection

### 8.1 Control parameters

#### Ingredients with Occupational Exposure Limits (EU)

Name	CAS-No.	LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3
xylene	1330-20-7	50	100	442	221
2-methylpropan-1-ol	78-83-1				
ethylbenzene	100-41-4	100	200	884	442
Butan-1-ol	71-36-3				
Fatty acids, tall-oil, reaction products with bis-A, epichlorohydrin, glycidyl tolyl ether and TETA	186321-96-0				
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2				
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2				

benzene-1,3-dimethanamine 1477-55-0  
phenol, styrenated 61788-44-1

<u>Name</u>	<u>CAS-No.</u>	<u>OEL Note</u>
xylene	1330-20-7	Can be absorbed through the skin.
2-methylpropan-1-ol	78-83-1	Can be absorbed through the skin.
ethylbenzene	100-41-4	Can be absorbed through the skin.
Butan-1-ol	71-36-3	Can be absorbed through the skin.
Fatty acids, tall-oil, reaction products with bis-A, epichlorohydrin, glycidyl tolyl ether and TETA	186321-96-0	
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	
benzene-1,3-dimethanamine	1477-55-0	
phenol, styrenated	61788-44-1	

**FURTHER ADVICE:** Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation. Annotations: Carc = Capable of causing cancer and/or heritable genetic damage, Sen = Capable of causing occupational asthma, Sk = Can be absorbed through the skin.

#### Chemical Name:

xylene

**EC No.:** 215-535-7  
**CAS-No.:** 1330-20-7

#### DNELs - Derived no effect level

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required				174 mg/m <sup>3</sup>	174 mg/m <sup>3</sup>		1.6 mg/kg bw/day
Inhalation	289 mg/m <sup>3</sup>	289 mg/m <sup>3</sup>	77 mg/m <sup>3</sup>	77 mg/m <sup>3</sup>				14.8 mg/m <sup>3</sup>
Dermal				180 mg/kg bw/day				108 mg/kg bw/day

#### PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.327 mg/L
Fresh water sediments	12.46 mg/kg
Marine water	0.327 mg/L
Marine sediments	12.46 mg/kg
Food chain	
Microorganisms in sewage treatment	6.58 mg/L
soil (agricultural)	2.31 mg/kg
Air	

**Chemical Name:**

2-methylpropan-1-ol

**EC No.:**

201-148-0

**CAS-No.:**

78-83-1

**DNELs - Derived no effect level**

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required						55 mg/m3	25 mg/kg
Inhalation			310 mg/m3					
Dermal								

**PNEC's - Predicted no effect concentration**

Environmental protection target	PNEC
Fresh water	0,4 mg/l
Fresh water sediments	1,56 mg/kg
Marine water	0,04 mg/l
Marine sediments	0,156 mg/kg
Food chain	
Microorganisms in sewage treatment soil (agricultural)	10 mg/l
Air	0,0756 mg/kg

**Chemical Name:**

ethylbenzene

**EC No.:**

202-849-4

**CAS-No.:**

100-41-4

**DNELs - Derived no effect level**

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							
Inhalation	293 mg/m3			77 mg/m3				1.6 mg/kg bw/day
Dermal				180 mg/kg bw/day				15 mg/m3

**PNEC's - Predicted no effect concentration**

Environmental protection target	PNEC
Fresh water	0.1 mg/L
Fresh water sediments	13.7 mg/kg
Marine water	0.01 mg/L
Marine sediments	1.37 mg/kg
Food chain	
Microorganisms in sewage treatment soil (agricultural)	2.68 mg/kg
Air	



**Chemical Name:**

Butan-1-ol

**EC No.:**

200-751-6

**CAS-No.:**

71-36-3

**DNELs - Derived no effect level**

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required						115 mg/m3	1.562 mg/kg bw/day
Inhalation			310 mg/m3					55.357 mg/m3
Dermal								3.125 mg/kg bw/day

**PNEC's - Predicted no effect concentration**

Environmental protection target	PNEC
Fresh water	0,082 mg/l
Fresh water sediments	0,178 mg/kg dw
Marine water	0,0082 mg/l
Marine sediments	0,0178 mg/kg dw
Food chain	
Microorganisms in sewage treatment soil (agricultural)	0,015 mg/kg dw
Air	

**Chemical Name:**

Fatty acids, tall-oil, reaction products with bis-A, epichlorohydrin, glycidyl tolyl ether and TETA

**EC No.:**

606-078-8

**CAS-No.:**

186321-96-0

**DNELs - Derived no effect level**

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							1.67 mg/kg bw/day
Inhalation				23.5 mg/m3				5.8 mg/m3
Dermal				3.33 mg/kg bw/day				1.67 mg/kg bw/day

**PNEC's - Predicted no effect concentration**

Environmental protection target	PNEC
Fresh water	0.186 ug/l
Fresh water sediments	0.005 mg/kg
Marine water	0.019 ug/l
Marine sediments	0.005 mg/kg
Food chain	
Microorganisms in sewage treatment soil (agricultural)	1.58 mg/l
Air	0.00089 mg/kg

**Chemical Name:**

2,4,6-tris(dimethylaminomethyl)phenol

**EC No.:**

202-013-9

**CAS-No.:**

90-72-2

**DNELs - Derived no effect level**

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required					0.13 mg/m3		0.075 mg/kg
Inhalation		2.1 mg/m3	4.9 mg/m3	0.53 mg/m3		0.075 mg/kg		0.13 mg/m3
Dermal		0.6 mg/kg		0.150 mg/kg				0.075 mg/kg

**PNEC's - Predicted no effect concentration**

Environmental protection target	PNEC
Fresh water	0.046 mg/l
Fresh water sediments	
Marine water	0.005 mg/l
Marine sediments	
Food chain	
Microorganisms in sewage treatment soil (agricultural)	0.2 mg/l
Air	0.025 mg/kg

**Chemical Name:**

3-Aminomethyl-3,5,5-trimethylcyclohexylamine

**EC No.:**

220-666-8

**CAS-No.:**

2855-13-2

**DNELs - Derived no effect level**

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							0.526 mg/kg
Inhalation	0.073 mg/m3		0.073 mg/m3					
Dermal								

**PNEC's - Predicted no effect concentration**

Environmental protection target	PNEC
Fresh water	0.06 mg/l
Fresh water sediments	5.784 mg/kg
Marine water	0.006mg/l
Marine sediments	0.578 mg/kg (dry weight)
Food chain	
Microorganisms in sewage treatment soil (agricultural)	1.121 mg/kg (dry weight)
Air	

**Chemical Name:**

benzene-1,3-dimethanamine

**EC No.:**

216-032-5

**CAS-No.:**

1477-55-0

**DNELs - Derived no effect level**

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							
Inhalation			0.2 mg/m <sup>3</sup>	1.2 mg/m <sup>3</sup>				
Dermal				0.33 mg/kg bw/day				

**PNEC's - Predicted no effect concentration**

Environmental protection target	PNEC
Fresh water	0.094 mg/L
Fresh water sediments	12.4 mg/kg
Marine water	0.0094 mg/L
Marine sediments	1.24 mg/kg
Food chain	
Microorganisms in sewage treatment	10 mg/L
soil (agricultural)	0.045 mg/kg
Air	

**Chemical Name:**

phenol, styrenated

**EC No.:**

262-975-0

**CAS-No.:**

61788-44-1

**DNELs - Derived no effect level**

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							
Inhalation				1.21 mg/m <sup>3</sup>				
Dermal				2.87 mg/kg bw/day				

**PNEC's - Predicted no effect concentration**

Environmental protection target	PNEC
Fresh water	11,5 µg/L
Fresh water sediments	1.564 mg/kg dw
Marine water	1.15 µg/L
Marine sediments	0.156 mg/kg dw
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	0.305 mg/kg dw
Air	

**8.2 Exposure controls****Personal Protection**

**RESPIRATORY PROTECTION:** Wear respiratory protection with combination filter (dust and gas filter, EN 14387:2004 +A1:2008) during spraying operations: Gas filter type A2 (organic substances). Dust filter P3 (for fine dust). When working in confined or poorly ventilated spaces, a battery powered assisted air-fed mask must be used.

**EYE PROTECTION:** Safety glasses with side-shields conforming to EN166.

**HAND PROTECTION:** Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature). Long sleeved clothing. Remove and wash contaminated clothing before re-use. Use chemical resistant gloves and lotions and barrier creams to prevent drying of the skin. Protective gloves complying with EN 374: Nitrile rubber. Butyl rubber. Viton®. Recommended glove material for mixed product: Protective gloves complying with EN 374: Butyl rubber. Nitril rubber.

**OTHER PROTECTIVE EQUIPMENT:** Ensure that eyewash stations and safety showers are close to the workstation location.

**ENGINEERING CONTROLS:** Ensure adequate ventilation, especially in confined areas.

## SECTION 9: Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

Colour	Reddish
Physical State	Liquid
Odor	Solvent
Odor threshold	Not determined
pH	Not determined
Melting point / freezing point (°C)	Not determined
Boiling point or initial boiling point and boiling range (°C)	106 - 152
Flash Point, (°C)	26
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Lower and upper explosive limit	1.0 - 10.9
Vapour Pressure	Not determined
Relative vapour density	>1 (air = 1)
Density and/or relative density	0.87 - 0.91
Solubility in / Miscibility with water	Negligible
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	400
Decomposition temperature (°C)	Not determined
Kinematic viscosity	> 20.5 cSt @40°C
Particle characteristics	Not applicable to liquids

### 9.2 Other information

VOC Content g/l: 703

Grams of VOC per liter of coating product as applied per ISO 11890-1 and/or ISO 11890-2.

Specific Gravity (g/cm<sup>3</sup>) 0.88

## SECTION 10: Stability and Reactivity

### 10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

No reactivity hazards known under normal storage and use conditions.

### 10.4 Conditions to avoid

Avoid heat, sparks, flames and other ignition sources.

### 10.5 Incompatible materials

Keep away from strong oxidising agents and strongly acid or alkaline materials.

### 10.6 Hazardous decomposition products

In case of fire or hot work operations, hazardous decomposition products may be formed such as:Carbon dioxide (CO<sub>2</sub>),

carbon monoxide (CO), oxides of nitrogen (NOx), aliphatic amines, aldehydes, cyanides.

## SECTION 11: Toxicological information

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

#### Acute Toxicity:

**Oral LD50:** No information available on the product itself as the product is not tested.

**Inhalation LC50:** No information available on the product itself as the product is not tested.

**Dermal LD50:** No information available on the product itself as the product is not tested.

**Irritation:** Irritating to skin.

**Corrosivity:** Causes serious eye damage.

**Sensitization:** May cause an allergic skin reaction.

**Repeated dose toxicity:** No information available.

**Carcinogenicity:** No information available.

**Mutagenicity:** No information available.

**Toxicity for reproduction:** No information available.

**STOT-single exposure:** Vapour/spray mist may irritate respiratory system and lungs.

**STOT-repeated exposure:** Central nervous system depression.

**Aspiration hazard:** No information available.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested.  
Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Name According to EEC</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>	<u>Gas LC50</u>	<u>Dust/Mist LC50</u>
1330-20-7	xylene	>2000 mg/kg (oral-rat)	1100 mg/kg (ATE dermal- rabbit)	11 mg/L (ATE inh/vapour)	4500 ppmV (ATE inh - Gas)	1.5 mg/L (ATE inh/dust/mist)
78-83-1	2-methylpropan-1-ol	24600 mg/kg (oral-rat)	> 2000 mg/kg (dermal - rabbit)	> 20 mg/L (Inhalation, rat, 6h)	8000 ppm	No information
100-41-4	ethylbenzene	3500 mg/kg rat, oral	5001 mg/kg, rabbit	17.2 mg/L. rat, 4h	10000 ppm	1.5 mg/L
71-36-3	Butan-1-ol	790 mg/kg (oral-rat)	3430 mg/kg (dermal-rabbit)	8000 mg/l 4hrs rat, inhalation	No information	No information
90-72-2	2,4,6-tris (dimethylaminomethyl)phenol	2169 mg/kg (oral, rat)	No information	No information	No information	No information
2855-13-2	3-Aminomethyl-3,5,5- trimethylcyclohexylamine	1030 mg/kg (oral-rat)	2000 mg/kg (dermal-rabbit)	No information	No information	>5.01 mg/L (inhal., dust/mist, rat)
1477-55-0	benzene-1,3-dimethanamine	980 mg/kg (oral, rat)	>2000 mg/kg (dermal, rabbit)	No information	No information	1.34 mg/L
61788-44-1	phenol, styrenated	>2000 mg/kg (Oral-rat)	>2000 mg/kg (Dermal-rat)	No information	No information	No information

**Additional Information:**

This product may contain Ethyl Benzene, which is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals. Corrosive - causes irreversible eye damage. Chronic exposure causes drying effect on the skin and eczema. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Gas or vapour is harmful on prolonged exposure or in high concentrations. Irritant of eyes and mucous membranes. CNS depressant. Inhalation is the main hazard in industrial use. The solvent vapours can be harmful and cause headaches, nausea, and intoxication. Acts as a defatting agent on skin. Chronic exposure has been associated with various neurotoxic effects including permanent brain damage. Inhalation of vapour or mist can cause headache, nausea, irritation of nose, throat, and lungs.

**11.2 Information on other hazards****Endocrine disrupting properties - Toxicity**

Based on the available data, the product does not contain substances identified as having endocrine disrupting properties according to Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentration of 0,1% or higher.

**SECTION 12: Ecological Information****12.1 Toxicity:**

EC50 48hr (Daphnia):	No information
IC50 72hr (Algae):	No information
LC50 96hr (fish):	No information

**12.2 Persistence and degradability:** No information

**12.3 Bioaccumulative potential:** No information

**12.4 Mobility in soil:** No information

**12.5 Results of PBT and vPvB assessment:** The product does not meet the criteria for PBT/vPvB in accordance with Annex XIII.

**12.6 Endocrine disrupting properties****Endocrine disrupting properties - Ecotoxicity**

Based on the available data, the product does not contain substances identified as having endocrine disrupting properties according to Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentration of 0,1% or higher.

**12.7 Other adverse effects:** No information

<u>CAS-No.</u>	<u>Name According to EEC</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
1330-20-7	xylene	1 - 5 mg/L (Daphnia magna)	3 - 5 mg/L (Selenastrum sp.)	2 - 11 mg/L (Roccus saxatilis), 8.2 mg/L (Salmo gairdneri), 13.5 mg/L (Lepomis macrochirus), 21.0 mg/L (Pimephales promelas)
78-83-1	2-methylpropan-1-ol	1100 mg/L (Daphnia magna)	1799 mg/L (Scenedesmus subspicatus)	1430 mg/L (Pimephales promelas)
100-41-4	ethylbenzene	1.8 - 2.4 mg/L (Daphnia magna)	5.4 mg/L (Pseudokirchneriella subcapitata)	4.2 mg/L (Oncorhynchus mykissl)
71-36-3	Butan-1-ol	No information	No information	1740 mg/l (Pimephales promelas)

186321-96-0	Fatty acids, tall-oil, reaction products with bis-A, epichlorohydrin, glycidyl tolyl ether and TETA	0.705 mg/L (Daphnia magna)	0.186 mg/L (Selenastrum capricornutum, ErC50)	1.806 mg/L (Oncorhynchus mykiss)
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	718 mg/L (EC50, 96h, Palaeomonetes vulgaris)	84 mg/L (EC50, 72h, Desmodesmus subspicatus)	175 mg/L (LC50, 96h, Cyprinus carpio)
2855-13-2	3-Aminomethyl-3,5,5-trimethylcyclohexylamine	23 mg/L (Daphnia magna)	37 mg/L (EC50, Desmodesmus subspicatus)	110 mg/L (Leuciscus idus)
1477-55-0	benzene-1,3-dimethanamine	15.2 mg/L (Daphnia magna)	32.1 mg/L (EC50, Selenastrum capricornutum)	87.6 mg/L (Oryzias latipes)
61788-44-1	phenol, styrenated	1-10 mg/L (EL50, daphnia OECD 202)	3.14 mg/L (ErL50, algae, OECD 201)	14.8 mg/L (LL50, OECD 203)

## SECTION 13: Disposal Considerations

**13.1 WASTE TREATMENT METHODS:** Do not burn, or use a cutting torch on, the empty drum. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Empty containers should be taken to an approved waste handling site for recycling or disposal. Rags/wiping cloths and the like, moistened with flammable liquids, must be discarded into designated fireproof buckets. Dispose of waste material at an approved (hazardous) waste treatment/disposal facility in accordance with applicable local state, and federal regulations. Do not dispose of waste with normal garbage, or to sewer systems.

**European Waste Code:** 08 01 11\*

**Packaging Waste Code:** 15 01 10\*

**SECTION 14: Transport Information**

	ADR/RID	ADN	IMDG	IATA
<b>14.1 UN-number or ID number</b>	UN1263	UN1263	UN1263	UN1263
<b>14.2 UN proper shipping name</b>	PAINT	PAINT	PAINT	PAINT
<b>14.3 Transport Hazard Class(es)</b>	3	3	3	3
<b>14.4 Packing Group</b>	III	III	III	III
<b>14.5 Enviromental Hazards</b>	Marine pollutant: No	Marine pollutant: No	Marine pollutant: No	Marine pollutant: No

- 14.6 Special precautions for user** Not applicable  
**EmS-No.:** F-E, S-E
- 14.7 Maritime transport in bulk according to IMO instruments** Not applicable

**SECTION 15: Regulatory Information****15.1 Safety, health and environmental regulations/legislation for the substance or mixture:****National Regulations:**

Denmark Product Registration Number: Not available

Danish MAL Code: Not available

Danish MAL Code - Mixture: Not available

Sweden Product Registration Number: Not available

Norway Product Registration Number: Not available

WGK Class: 3

Covered by Directive 2012/18/EC (Seveso III): P5c

Restrictions to product or to substances according to Annex XVII, Regulation (CE) 1907/2006: Entry 3, 40



**Annex XIV - Annex XIV, Regulation (CE) 1907/2006 - Authorisation List:****CAS-No.      Name According to EEC**

Not Applicable

**SVHC - Substances of very high concern (Candidate List - Art. 59 REACH):****CAS-No.      Name According to EEC**

Not Applicable

**15.2 Chemical Safety Assessment:**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

**SECTION 16: Other Information****Text for CLP Hazard Statements shown in Section 3 describing each ingredient:**

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
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.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

**Reasons for revision**

Changes have been made to Section 2 of the Safety Data Sheet (SDS). Please refer to the Hazard Identification information in Section 2 of this SDS. Changes have been made to Section 9 of the Safety Data Sheet (SDS). Please refer to the Physical and Chemical Properties information in Section 9 of this SDS. .

**List of References**

This Safety Data Sheet was compiled with data and information from the following sources:

- The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark
- Joint Research Centre in Ispira, Italy
- Regulation (EC) 1272/2008 with subsequent amendments
- Regulation (EC) 1907/2006 with subsequent amendments
- Commission Regulation (EU) 2020/878
- Eu Council Decision 2000/532/EC and its Annex entitled "List of Wastes"
- Safety Data Sheet from raw material supplier
- The classification declared in sec. 2.2 is based on the calculation methods set out in Annex I and Annex II of the CLP Reg. 1272/2008 on the composition of the formula.

**Acronym & Abbreviation Key**

CLP	Classification, Labeling & Packaging Regulation
EC	European Commission
EU	European Union
US	United States
CAS	Chemical Abstract Service

EINECS	European Inventory of Existing Chemical Substances
REACH	Registration, Evaluation, Authorization of Chemicals Regulation
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
LTEL	Long term exposure limit
STEL	Short term exposure limit
OEL	Occupational exposure limit
ppm	Parts per million
mg/m3	Milligrams per cubic meter
TLV	Threshold Limit Value
ACGIH	American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety & Health Administration
PEL	Permissible Exposure Limits
VOC	Volatile organic compounds
g/l	Grams per liter
mg/kg	milligrams per kilogram
N/A	Not applicable
LD50	Lethal dose at 50%
LC50	Lethal concentration at 50%
EC50	Half maximal effective concentration
IC50	Half maximal inhibitory concentration
PBT	Persistent bioaccumulative toxic chemical
vPvB	Very persistent and very bioaccumulative
EEC	European Economic Community
ADR	International Transport of Dangerous Goods by Road
RID	International Transport of Dangerous Goods by Rail
UN	United Nations
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association
MARPOL	International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978
IBC	International Bulk Container
RTI	Respiratory Tract Irritation
NE	Narcotic Effects
IMO	International Maritime Organization
Note P:	The classification as a carcinogen or mutagen need not apply; the substance contains less than 0,1 % w/w benzene
Note 10:	The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter $\leq 10 \mu\text{m}$ .

For further information, please contact: Regulatory Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.