



Safety Data Sheet
according to Regulation (EC)
No. 2015/830

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

1.1	Product Identifier	8323	Revision Date:	06/01/2022
	Product Name:	CARBOMASTIC 20 PART A	Supersedes Date:	18/01/2021
			Version Number:	2
	UFI Code:	7CF0-T0UE-400P-9MM7		
1.2	Relevant identified uses of the substance or mixture and uses advised against	Base component of 2 components coating - Industrial use. Advised against: Please see Technical Data Sheet.		
	Product to be mixed with:	CARBOMASTIC 20 PART B		
	Mixing ratio by volume Part A/ Part B:	3:1		
1.3	Details of the supplier of the safety data sheet			
	Importer:	None		
	Manufacturer:	Carboline Norge AS Postboks 593 3412 Lierstranda Norway		
		Regulatory / Technical Information: +47 32 85 73 00 +47 32 85 74 00		
	Datasheet Produced by:	Tarka, Malgorzata - hms@carboline.com		
1.4	Emergency telephone number:	CHEMTREC +1 703 5273887 (Outside US)		

SECTION 2: Hazard Identification

2.1 Classification of the substance or mixture

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

HAZARD STATEMENTS

Other EU extensions	EUH211
Flammable Liquid, category 3	H226
Skin Irritation, category 2	H315
Skin Sensitizer, category 1	H317
Serious Eye Damage, category 1	H318
Hazardous to the aquatic environment, Chronic, category 2	H411

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

4-tert-Butylphenol, benzene-1,3-dimethanamine, 3-Aminomethyl-3,5,5-trimethylcyclohexylamine, phenol, styrenated, phenol, methylstyrenated, Fatty acids, tall-oil, reaction products with bis-A, epichlorohydrin, glycidyl tolyl ether and TETA

HAZARD STATEMENTS

Other EU extensions	EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
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.
Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic to aquatic life with long lasting effects.

PRECAUTION PHRASES

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
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.

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.

SECTION 3: Composition/Information On Ingredients

3.2 Mixtures

Hazardous ingredients

<u>Name According to EEC</u>	<u>EINEC No.</u>	<u>CAS-No.</u>	<u>%</u>	<u>Classifications</u>	
phenol, methylstyrenated	270-966-8	68512-30-1	10 - <25	H315-317-412	Aquatic Chronic 3, Skin Irrit. 2, Skin Sens. 1
talc	238-877-9	14807-96-6	10 - <25		
phenol, styrenated	262-975-0	61788-44-1	2.5 - <10	H315-317-411	Aquatic Chronic 2, Skin Irrit. 2, Skin Sens. 1

xylene	215-535-7	1330-20-7	2.5 - <10	H226-304-312-315 -319-332-335-373	Acute Tox. 4 Dermal, Acute Tox. 4 Inhalation, Asp. Tox. 1, Eye Irrit. 2, Flam. Liq. 3, Skin Irrit. 2, STOT RE 2, STOT SE 3 RTI
titanium dioxide	236-675-5	13463-67-7	2.5 - <10		
4-tert-Butylphenol	202-679-0	98-54-4	2.5 - <10	H315-318-361F-41 0	Aquatic Chronic 1, Eye Dam. 1, Repr. 2, Skin Irrit. 2
Fatty acids, tall-oil, reaction products with bis-A, epichlorohydrin, glycidyl tolyl ether and TETA	606-078-8	186321-96-0	1.0 - <2.5	H315-317-318-400 -410	Aquatic Acute 1, Aquatic Chronic 1, Eye Dam. 1, Skin Irrit. 2, Skin Sens. 1
benzene-1,3- dimethanamine	216-032-5	1477-55-0	1.0 - <2.5	H302-314-317-332 -412	Acute Tox. 4 Inhalation, Acute Tox. 4 Oral, Aquatic Chronic 3, Corr. Resp., Skin Corr. 1B, Skin Sens. 1
1-methoxypropan-2-ol	203-539-1	107-98-2	1.0 - <2.5	H226-336	Flam. Liq. 3, STOT SE 3 NE
ethylbenzene	202-849-4	100-41-4	1.0 - <2.5	H225-304-332-373 -412	Acute Tox. 4 Inhalation, Aquatic Chronic 3, Asp. Tox. 1, Flam. Liq. 2, STOT RE 2
Formaldehyde, polymer with N,N-dimethyl-1,3- propanediamine and phenol		445498-00-0	0.1 - <1.0	H302-400-410	Acute Tox. 4 Oral, Aquatic Acute 1, Aquatic Chronic 1
3- aminopropyltriethoxysila ne	213-048-4	919-30-2	0.1 - <1.0	H302-314-317	Acute Tox. 4 Oral, Skin Corr. 1B, Skin Sens. 1
2,4,6-tris (dimethylaminomethyl) phenol	202-013-9	90-72-2	0.1 - <1.0	H302-314-318	Acute Tox. 4 Oral, Eye Dam. 1, Skin Corr. 1C
3-Aminomethyl-3,5,5- trimethylcyclohexylamin e	220-666-8	2855-13-2	0.1 - <1.0	H302-312-314-317 -412	Acute Tox. 4 Dermal, Acute Tox. 4 Oral, Aquatic Chronic 3, Skin Corr. 1B, Skin Sens. 1A

CAS-No.**M-Factors****REACH Reg No.**

68512-30-1
14807-96-6
61788-44-1
1330-20-7
13463-67-7
98-54-4

1

01-2119555274-38

01-2119980970-27
01-2119488216-32
01-2119489379-17
01-2119489419-21

186321-96-0	01-2119983521-35
1477-55-0	01-2119480150-50
107-98-2	01-2119457435-35
100-41-4	01-2119489370-35
445498-00-0	
919-30-2	01-2119480479-24
90-72-2	01-2119560597-27
2855-13-2	01-2119514687-32

Remarks: CAS No. 68512-30-1 identified as EC No. 700-960-7 under REACH Registration
CAS No 13463-67-7: Note 10

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

Irritating to skin. May cause sensitization by skin contact. 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: Fire-fighting 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

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

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 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)**

<u>Name</u>	<u>CAS-No.</u>	<u>LTEL ppm</u>	<u>STEL ppm</u>	<u>STEL mg/m3</u>	<u>LTEL mg/m3</u>
phenol, methylstyrenated	68512-30-1				
talc	14807-96-6				
phenol, styrenated	61788-44-1				
xylene	1330-20-7	50	100	442	221
titanium dioxide	13463-67-7				
4-tert-Butylphenol	98-54-4				
Fatty acids, tall-oil, reaction products with bis-A, epichlorohydrin, glycidyl tolyl ether and TETA	186321-96-0				
benzene-1,3-dimethanamine	1477-55-0				
1-methoxypropan-2-ol	107-98-2	100	150	568	375
ethylbenzene	100-41-4	100	200	884	442
Formaldehyde, polymer with N,N-dimethyl-1,3-propanediamine and phenol	445498-00-0				
3-aminopropyltriethoxysilane	919-30-2				
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2				
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2				

<u>Name</u>	<u>CAS-No.</u>	<u>OEL Note</u>
phenol, methylstyrenated	68512-30-1	
talc	14807-96-6	
phenol, styrenated	61788-44-1	
xylene	1330-20-7	Can be absorbed through the skin.
titanium dioxide	13463-67-7	
4-tert-Butylphenol	98-54-4	
Fatty acids, tall-oil, reaction products with bis-A, epichlorohydrin, glycidyl tolyl ether and TETA	186321-96-0	
benzene-1,3-dimethanamine	1477-55-0	
1-methoxypropan-2-ol	107-98-2	Can be absorbed through the skin.
ethylbenzene	100-41-4	Can be absorbed through the skin.
Formaldehyde, polymer with N,N-dimethyl-1,3-propanediamine and phenol	445498-00-0	
3-aminopropyltriethoxysilane	919-30-2	
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	

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.

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: If splashes are likely to occur, wear: 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: Butyl rubber. Nitril rubber. 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.

Chemical Name:

phenol, methylstyrenated

EC No.:

270-966-8

CAS-No.:

68512-30-1

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							4 mg/kg/day
Inhalation				57 mg/m ³				28 mg/m ³
Dermal				16.4 mg/kg/day				8 mg/kg/day

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	14 µg/L
Fresh water sediments	52.9 mg/kg
Marine water	
Marine sediments	1.4 µg/L; 5.3 mg/kg
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	10.5 mg/kg
Air	

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 ³	174 mg/m ³		1.6 mg/kg bw/day
Inhalation	289 mg/m ³	289 mg/m ³		77 mg/m ³				14.8 mg/m ³
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:

titanium dioxide

EC No.:

236-675-5

CAS-No.:

13463-67-7

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						10 mg/m ³	700 mg/kg/ bw/ day
Inhalation			10 mg/m ³					
Dermal								

PNEC's - Predicted no effect concentration

	PNEC
Environmental protection target	
Fresh water	0.127 mg/L
Fresh water sediments	1000 mg/kg dw
Marine water	1 mg/L
Marine sediments	100 mg/kg dw
Food chain	1667 mg/kg (oral)
Microorganisms in sewage treatment	100 mg/kg
soil (agricultural)	100 mg/kg dw
Air	

Chemical Name:

4-tert-Butylphenol

EC No.:

202-679-0

CAS-No.:

98-54-4

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							0.026 mg/kg
Inhalation				0.5 mg/m ³				0.09 mg/m ³
Dermal				0.071 mg/kg				0.026 mg/kg

PNEC's - Predicted no effect concentration

	PNEC
Environmental protection target	
Fresh water	
Fresh water sediments	
Marine water	
Marine sediments	
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	
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/m ³				5.8 mg/m ³
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	1.58 mg/l
soil (agricultural)	0.00089 mg/kg
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 ³	1.2 mg/m ³				
Dermal				0.33 mg/kg bw/day				

PNEC

PNEC's - Predicted no effect concentration

Environmental protection target	
Fresh water	0.094 mg/L
Fresh water sediments	0.43 mg/kg
Marine water	0.0094 mg/L
Marine sediments	0.043 mg/kg
Food chain	
Microorganisms in sewage treatment	10 mg/L
soil (agricultural)	0.045 mg/kg
Air	

Chemical Name:

1-methoxypropan-2-ol

EC No.:

203-539-1

CAS-No.:

107-98-2

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						3.3 mg/kg	43.9 mg/m3
Inhalation	553.5 mg/m3	553.5 mg/m ³		369 mg/m3				18.1 mg/kg
Dermal				50.6 mg/kg bw/day				

PNEC's - Predicted no effect concentration

PNEC

Environmental protection target	
Fresh water	10 mg/L
Fresh water sediments	41.6 mg/kg
Marine water	1 mg/L
Marine sediments	4.17 mg/kg
Food chain	
Microorganisms in sewage treatment	100 mg/L
soil (agricultural)	2.47 mg/kg
Air	

Chemical Name:

3-aminopropyltriethoxysilane

EC No.:

213-048-4

CAS-No.:

919-30-2

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							
Inhalation		59 mg/m3		59 mg/m3				
Dermal		8.3 mg/Kg bw/day		8.3 mg/Kg bw/day				

PNEC

PNEC's - Predicted no effect concentration

Environmental protection target	
Fresh water	0.33 mg/l
Fresh water sediments	
Marine water	0.033 mg/l
Marine sediments	
Food chain	
Microorganisms in sewage treatment	13 mg/l
soil (agricultural)	0.04 mg/kg
Air	

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							
Inhalation			4.9 mg/m3	0.31 mg/m3				
Dermal								

PNEC

PNEC's - Predicted no effect concentration

Environmental protection target	
Fresh water	0.084 mg/l
Fresh water sediments	
Marine water	0.0084 mg/l
Marine sediments	
Food chain	
Microorganisms in sewage treatment	0.2 mg/l
soil (agricultural)	
Air	

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 bodyweight/day
Inhalation	20.1	20.1						
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	

SECTION 9: Physical and Chemical Properties**9.1 Information on basic physical and chemical properties**

Appearance:	Misc. Colours
Physical State	LIQUID
Odor	Solvent
Odor threshold	Not determined
pH	Not determined
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	120 - 144
Flash Point, (°C)	26
Evaporation rate	Not determined

Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	1.0 - 13.7
Vapour Pressure, mmHg	Not determined
Vapour density	>1 (air = 1)
Relative density	1.4 - 1.5
Solubility in / Miscibility with water	Insoluble
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	287
Decomposition temperature (°C)	Not determined
Viscosity	92 - 98 KU
Explosive properties	Not determined
Oxidising properties	Not determined

9.2 Other information

VOC Content g/l:	110
Grams of VOC per liter of coating product as applied per ISO 11890-1 and/or ISO 11890-2.	
Specific Gravity (g/cm3)	1.48

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 (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), aliphatic amines, aldehydes, cyanides.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects**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.

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:	No information available.
STOT-repeated exposure:	No information available.
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>
68512-30-1	phenol, methylstyrenated	>2000 mg/kg (oral-rat)	>2000 mg/kg (dermal-rat)	No information	No information	No information
61788-44-1	phenol, styrenated	>2000 mg/kg (Oral-rat)	>2000 mg/kg (Dermal-rat)	No information	No information	No information
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)
13463-67-7	titanium dioxide	>5000 mg/kg (oral-rat)	10000 mg/kg	No information	No information	>6.82 mg/L (inh-rat-4h)
98-54-4	4-tert-Butylphenol	>2000 mg/kg	5600 mg/kg	No information	No information	No information
1477-55-0	benzene-1,3-dimethanamine	1514 mg/kg (oral, rat)	>2000 mg/kg (dermal, rabbit)	No information	No information	No information
107-98-2	1-methoxypropan-2-ol	4016 mg/kg (oral-rat)	>13000 mg/kg (dermal-rabbit)	10000 ppm/4hrs rat, inhalation	No information	No information
100-41-4	ethylbenzene	3500 mg/kg rat, oral	5510 mg/kg, rabbit	4000 ppm, rat, 4h	10000 ppm	1.5 mg/L
445498-00-0	Formaldehyde, polymer with N,N-dimethyl-1,3-propanediamine and phenol	>300 mg/kg (LD50 Oral, rat F)	No information	No information	No information	No information
919-30-2	3-aminopropyltriethoxysilane	1570 mg/kg (oral-rat)	4290 mg/kg (dermal-rabbit)	No information	No information	No information
90-72-2	2,4,6-tris (dimethylaminomethyl)phenol	2169 mg/kg (oral, rat)	2110 mg/kg (dermal, rabbit)	No information	No information	No information
2855-13-2	3-Aminomethyl-3,5,5-trimethylcyclohexylamine	1030 mg/kg (oral-rat)	1840 mg/kg (dermal-rabbit)	No information	No information	>5.01 mg/L (inhal., dust/mist, rat)

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. This product may contain Titanium Dioxide, 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. This classification is relevant when exposed to titanium dioxide in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. 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.

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 Other adverse effects: No information

CAS-No.	Name According to EEC	EC50 48hr	IC50 72hr	LC50 96hr
68512-30-1	phenol, methylstyrenated	14 - 51 mg/L (daphnia)	15 mg/L (algae)	25.8 mg/L (fish)
61788-44-1	phenol, styrenated	1-10 mg/L (EL50, daphnia)	3.14 mg/L (EL50, algae)	No information
1330-20-7	xylene	165 mg/L (Daphnia magna 24h)	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)
13463-67-7	titanium dioxide	>100 mg/l (EC50, 48h, Daphnia magna OECD202)	16 mg/l (EC50, 72h, Pseudokirchnerella subcapitata)	>100 mg/l (EC50, 96h, Oncorhynchus Mykiss OECD203)
98-54-4	4-tert-Butylphenol	3.4 to 4.5 mg/l	2.4 mg/l	4.71 to 5.62 mg/l
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)
1477-55-0	benzene-1,3-dimethanamine	15.2 mg/L (Daphnia magna)	33.3 mg/L (EC50, Pseudokirchneriella subcapitata)	87.6 mg/L (Oryzias latipes)
107-98-2	1-methoxypropan-2-ol	>21000 mg/L (Daphnia magna)	No information	6812 mg/L (Leuciscus idus)
100-41-4	ethylbenzene	1.37 mg/L	No information	32 mg/L (Bluegill)
445498-00-0	Formaldehyde, polymer with N,N-dimethyl-1,3-propanediamine and phenol	24 mg/L (Daphnia, EC50, 48h, static)	>0.219 mg/L (Algae, EC50, 72h, static)	40 mg/L (fish, LC50, 96h, static)
919-30-2	3-aminopropyltriethoxysilane	No information	>1000 mg/L (EC50, 72h, Desmodesmus Subspicatus)	934 mg/L (CL50 96h, Brachydanio rerio)
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)

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

14.1	UN number	UN1263
14.2	UN proper shipping name	PAINT
	Technical name	Not applicable
14.3	Transport hazard class(es)	3
	Subsidiary shipping hazard	Not applicable
14.4	Packing group	III
14.5	Environmental hazards	Marine pollutant: Yes (4-tertbutyl phenol)
14.6	Special precautions for user	No Information
	EmS-No.:	F-E, S-E
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	No Information

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, E2

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

Annex XIV - Authorisation List:CAS-No. Name According to EEC

Not Applicable

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

98-54-4 4-tert-Butylphenol

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.
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.
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
 ESIS (The European Chemical Substances Information System), provided by the European Commission
 Joint Research Centre in Ispra, Italy
 Annex VI of the EU Council Directive 67/548/EEC
 Council Directive 67/548/EEC - Annex I or EU Council Directive 1999/45/EC
 EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"

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

For further information, please contact: Technical Services 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.