



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

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

1.1	Product Identifier	J176B	Revision Date:	17/07/2024
	Product Name:	SP-2881 - B	Supersedes Date:	23/10/2023
			Version Number:	4
	UFI Code:	C4RJ-F12J-V00X-HT29		
	Contain nanoform:	No		
1.2	Relevant identified uses of the substance or mixture and uses advised against	Hardener for 2 components coatings - Industrial use. Please see Technical Data Sheet. Advised against: others than recommended		
	Product to be mixed with:	SP-2881 - A		
	Mixing ratio by volume Part A/ Part B:	1 / 1		
1.3	Details of the supplier of the safety data sheet			
	Supplier:	Carboline Italia, S.p.a. Via Margherita Viganò De Vizzi, 77 20092 Cinisello Balsamo (MI) Italy		
		Regulatory / Technical Information: +32 67493710 Nivelles, Belgium +39 0294759236 Cinisello Balsamo, Italy		
	Datasheet Produced by:	Calcagno, Elena - hms@carboline.com		
1.4	Emergency telephone number:	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  
 Skin Corrosion, category 1C  
 Skin Sensitizer, category 1  
 Reproductive Toxicity, category 2  
 STOT, repeated exposure, category 2  
 Hazardous to the aquatic environment, Chronic, category 2

H226  
 H314-1C  
 H317  
 H361F  
 H373  
 H411

**2.2 Label elements****Symbol(s) of Product****Signal Word**

Danger

**Named Chemicals on Label**

2,4,6-tris(dimethylaminomethyl)phenol, 4-tert-Butylphenol, Benzyl alcohol, 2-piperazin-1-ylethylamine, 1,2-cyclohexanediamine, quartz (silicon dioxide), Propylidynetrimethanol, propoxylated, reaction products with ammonia

**HAZARD STATEMENTS**

Skin drying or cracking	EUH066	Repeated exposure may cause skin dryness or cracking.
Corrosive to the respiratory tract	EUH071	Corrosive to the respiratory tract.
Flammable Liquid, category 3	H226	Flammable liquid and vapour.
Skin Corrosion, category 1C	H314-1C	Causes severe skin burns and eye damage.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Reproductive_ToxicityF_category_2	H361F	Suspected of damaging fertility.
STOT, repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
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.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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.

**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**

Name According to EEC

CAS-No.

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**

Name According to EEC

CAS-No.

4-tert-Butylphenol

98-54-4

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

Not applicable

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

<u>Name According to EEC</u> <u>EINEC No.</u> <u>CAS-No.</u> <u>REACH Reg No.</u>	<u>%</u>	<u>Classifications</u>	SCL Value: ATE Value: M-Factor:
Propylidynetrimethanol, propoxylated, reaction products with ammonia 500-105-6 39423-51-3 01-2119556886-20	10 - <25	H302-312-315-318-411  Acute Tox. 4 Dermal, Acute Tox. 4 Oral, Aquatic Chronic 2, Eye Dam. 1, Skin Irrit. 2	SCL Value: -  ATE Value: -  M-Factor: (acute) -  M-Factor: (chronic) -
Benzyl alcohol 202-859-9 100-51-6 01-2119492630-38 603-057-00-5	2.5 - <10	H302-319-332  Acute Tox. 4 Inhalation, Acute Tox. 4 Oral, Eye Irrit. 2, Skin Sens. 1	SCL Value: -  ATE Value: -  M-Factor: (acute) -  M-Factor: (chronic) -

1,2-cyclohexanediamine 211-776-7 694-83-7 No Information	2.5 - <10	H302-312-314-317-332-335  Acute Tox. 4 Dermal, Acute Tox. 4 Inhalation, Acute Tox. 4 Oral, Skin Corr. 1A, Skin Sens. 1, STOT SE 3 RTI	<b>SCL Value:</b>	-
			<b>ATE Value:</b>	-
			<b>M-Factor: (acute)</b>	-
			<b>M-Factor: (chronic)</b>	-
quartz (silicon dioxide) 238-878-4 14808-60-7 No Information	2.5 - <10	H372  STOT RE 1	<b>SCL Value:</b>	-
			<b>ATE Value:</b>	-
			<b>M-Factor: (acute)</b>	-
			<b>M-Factor: (chronic)</b>	-
4-tert-Butylphenol 202-679-0 98-54-4 01-2119489419-21 604-090-00-8	2.5 - <10	H315-318-361F-410  Aquatic Chronic 1, Eye Dam. 1, Repr. 2, Skin Irrit. 2	<b>SCL Value:</b>	-
			<b>ATE Value:</b>	-
			<b>M-Factor: (acute)</b>	1
			<b>M-Factor: (chronic)</b>	1
2,4,6-tris(dimethylaminomethyl) phenol 202-013-9 90-72-2 01-2119560597-27 603-069-00-0	2.5 - <10	H302-314  Acute Tox. 4 Oral, Skin Corr. 1C	<b>SCL Value:</b>	-
			<b>ATE Value:</b>	-
			<b>M-Factor: (acute)</b>	-
			<b>M-Factor: (chronic)</b>	-

butanone 201-159-0 78-93-3 01-2119457290-43 606-002-00-3	1.0 - <2.5	H225-319-336  Eye Irrit. 2, Flam. Liq. 2, Skin Cracking, STOT SE 3 NE	<b>SCL Value:</b>	-
			<b>ATE Value:</b>	-
			<b>M-Factor: (acute)</b>	-
			<b>M-Factor: (chronic)</b>	-
2-piperazin-1-ylethylamine 205-411-0 140-31-8 01-2119471486-30 612-105-00-4	1.0 - <2.5	H302-311-314-317-361-372-412  Acute Tox. 3 Dermal, Acute Tox. 4 Oral, Aquatic Chronic 3, Repr. 2, Skin Corr. 1B, Skin Sens. 1, STOT RE 1	<b>SCL Value:</b>	-
			<b>ATE Value:</b>	-
			<b>M-Factor: (acute)</b>	-
			<b>M-Factor: (chronic)</b>	-
ethanol 200-578-6 64-17-5 01-2119457610-43 603-002-00-5	1.0 - <2.5	H225-319  Eye Irrit. 2, Flam. Liq. 2	<b>SCL Value:</b>	-
			<b>ATE Value:</b>	-
			<b>M-Factor: (acute)</b>	-
			<b>M-Factor: (chronic)</b>	-
xylene 215-535-7 1330-20-7 01-2119488216-32 601-022-00-9	0.1 - <1.0	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 Value:</b>	-
			<b>ATE Value:</b>	-
			<b>M-Factor: (acute)</b>	-
			<b>M-Factor: (chronic)</b>	-

ethylbenzene 202-849-4 100-41-4 01-2119489370-35 601-023-00-4	0.1 - <1.0	H225-304-332-373-412  Acute Tox. 4 Inhalation, Aquatic Chronic 3, Asp. Tox. 1, Flam. Liq. 2, STOT RE 2	<b>SCL Value:</b>	-
			<b>ATE Value:</b>	-
			<b>M-Factor: (acute)</b>	-
			<b>M-Factor: (chronic)</b>	-

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

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

#### 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

Causes burns. May cause sensitization by skin contact. Danger of serious damage to health by prolonged exposure. Causes serious eye damage. Suspected of damaging fertility or the unborn child.

### 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

**FURTHER INSTRUCTIONS:** 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)

No specific advice for end use available.

## 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>
Propylidynetrimethanol, propoxylated, reaction products with ammonia	39423-51-3				
Benzyl alcohol	100-51-6				
1,2-cyclohexanediamine	694-83-7				

quartz (silicon dioxide)	14808-60-7				
4-tert-Butylphenol	98-54-4				
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2				
butanone	78-93-3	200	300	900	600
2-piperazin-1-ylethylamine	140-31-8				
ethanol	64-17-5				
xylene	1330-20-7	50	100	442	221
ethylbenzene	100-41-4	100	200	884	442

**Name**                      **CAS-No.**   **OEL Note**

Propylidynetrimethanol, propoxylated, reaction products with ammonia      39423-51-3

Benzyl alcohol                      100-51-6

1,2-cyclohexanediamine                      694-83-7

quartz (silicon dioxide)                      14808-60-7

4-tert-Butylphenol                      98-54-4

2,4,6-tris(dimethylaminomethyl)phenol                      90-72-2

butanone                      78-93-3                      Sk

2-piperazin-1-ylethylamine                      140-31-8

ethanol                      64-17-5

xylene                      1330-20-7                      Sk

ethylbenzene                      100-41-4                      Sk

**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:**

Propylidynetrimethanol, propoxylated, reaction products with ammonia

**EC No.:**

500-105-6

**CAS-No.:**

39423-51-3

**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							
Inhalation				14 mg/m <sup>3</sup>				0.8 mg/kg bw/day
Dermal				1.6 mg/kg bw/day				3.48 mg/m <sup>3</sup>

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

Environmental protection target	PNEC
Fresh water	0.0044 mg/l
Fresh water sediments	0.02 mg/kg
Marine water	0.00044 mg/l
Marine sediments	0.002 mg/kg
Food chain	
Microorganisms in sewage treatment	10 mg/l-sewage treatment
soil (agricultural)	0.002 mg/kg
Air	



**Chemical Name:**

Benzyl alcohol

**EC No.:**

202-859-9

**CAS-No.:**

100-51-6

**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					20 mg/Kg bw/day	5 mg/kg bw/day	4 mg/kg bw/day
Inhalation		110 mg/m <sup>3</sup>		22 mg/m <sup>3</sup>		27 mg/m <sup>3</sup>		5.4 mg/m <sup>3</sup>
Dermal		40 mg/kg bw/day		8 mg/kg bw/day		20 mg/kg bw/day		4 mg/kg bw/day

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

Environmental protection target	PNEC
Fresh water	1 mg/L
Fresh water sediments	5.27 mg/kg ww
Marine water	0.1 mg/L
Marine sediments	0.527 mg/kg ww
Food chain	
Microorganisms in sewage treatment	39 mg/L
soil (agricultural)	0.456 mg/kg ww
Air	

**Chemical Name:**

1,2-cyclohexanediamine

**EC No.:**

211-776-7

**CAS-No.:**

694-83-7

**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							
Inhalation	0,5 mg/m <sup>3</sup>	0,5 mg/m <sup>3</sup>	0,25 mg/m <sup>3</sup>	0,25 mg/m <sup>3</sup>				
Dermal			1,5 mg/kg	1,5 mg/kg				

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

Environmental protection target	PNEC
Fresh water	0.42 mg/l
Fresh water sediments	
Marine water	0.042 mg/l
Marine sediments	
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	
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/m3				0.09 mg/m3
Dermal				0.071 mg/kg				0.026 mg/kg

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

Environmental protection target	PNEC
Fresh water	
Fresh water sediments	
Marine water	
Marine sediments	
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	
Air	

**Chemical Name:**

butanone

**EC No.:**

201-159-0

**CAS-No.:**

78-93-3

**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							31 mg/kg bw/day
Inhalation				600 mg/m <sup>3</sup>				106 mg/m <sup>3</sup>
Dermal				1161 mg/kg bw/day				412 mg/kg bw/day

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

Environmental protection target	PNEC
Fresh water	55.8 mg/L
Fresh water sediments	284.74 mg/kg dw
Marine water	55.8 mg/L
Marine sediments	284.7 mg/kg dw
Food chain	
Microorganisms in sewage treatment	709 mg/L
soil (agricultural)	22.5 mg/kg dw
Air	

**Chemical Name:**

2-piperazin-1-ylethylamine

**EC No.:**

205-411-0

**CAS-No.:**

140-31-8

**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				0.02 mg/kg bw/day	1.5 mg/kg bw/day		0.3 mg/kg bw/day
Inhalation		21.4 mg/m3		3.6 mg/m3		5.3 mg/m3		0.9 mg/m3
Dermal		20 mg/kg bw/day	0.006 mg/cm2	3.3 mg/kg bw/day		10 mg/kg bw/day	0.003 mg/cm2	1.7 mg/cm2

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

Environmental protection target	PNEC
Fresh water	0.058 mg/l
Fresh water sediments	215 mg/kg dwt
Marine water	0.0058 mg/l
Marine sediments	21.5 mg/kg bwt
Food chain	
Microorganisms in sewage treatment	82.2 mg/l
soil (agricultural)	42.9 mg/kg dwt
Air	

**Chemical Name:**

ethanol

**EC No.:**

200-578-6

**CAS-No.:**

64-17-5

**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							87 mg/kg bw/day
Inhalation	1900 mg/m3			950 mg/m3	950 mg/m3			114 mg/m3
Dermal				343 mg/kg bw/day				206 mg/kg bw/day

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

Environmental protection target	PNEC
Fresh water	0.96 mg/L
Fresh water sediments	3.6 mg/kg
Marine water	0.79 mg/L
Marine sediments	2.9 mg/kg
Food chain	
Microorganisms in sewage treatment	580 mg/L
soil (agricultural)	0.63 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							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>	174 mg/m <sup>3</sup>	174 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	

**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:** Face-shield.

**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.

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

Colour:	Various colors
Physical State	Liquid
Odor	Amine
Odor threshold	Not determined
pH	Not determined
Melting point / freezing point (°C)	Not determined
Boiling point or initial boiling point and boiling range (°C)	77 - Not determined
Flash Point, (°C)	57
Evaporation rate	Not determined

Flammability (solid, gas)	Not determined
Lower and upper explosive limit	Not determined
Vapour Pressure	Not determined
Relative vapour density	>1 (air=1)
Density and/or relative density	Not determined
Solubility in / Miscibility with water	Negligible
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	Not determined
Decomposition temperature (°C)	Not determined
Kinematic viscosity	Not determined
Particle characteristics	Not applicable to liquids

## 9.2 Other information

VOC Content g/l:	50
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> )	1,61

## SECTION 10: Stability and Reactivity

### 10.1 Reactivity

No reactivity hazards known under recommended storage and use conditions.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No reactivity hazards known under recommended 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 (NO<sub>x</sub>), aliphatic amines, aldehydes.

## 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.
Inhalation LC50:	No information available.
Dermal LD50:	No information available.

Irritation: No information available.

Corrosivity: Corrosive to eyes and skin.

Sensitization: May cause an allergic skin reaction.

<b>Repeated dose toxicity:</b>	No information available.
<b>Carcinogenicity:</b>	No information available.
<b>Mutagenicity:</b>	No information available.
<b>Toxicity for reproduction:</b>	Reproductive Toxicity, category 2
<b>STOT-single exposure:</b>	No information available.
<b>STOT-repeated exposure:</b>	STOT RE 2
<b>Aspiration hazard:</b>	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>
39423-51-3	Propylidynetrimethanol, propoxylated, reaction products with ammonia	550 mg/kg rat	>1000 mg/kg rat	No information	No information	No information
100-51-6	Benzyl alcohol	1200 mg/kg rat	2980 mg/kg, rabbit	No information	>20000 ppm	>4.178 mg/L (4h/ rat, mist)
694-83-7	1,2-cyclohexanediamine	1170 mg/kg, rat, oral	1870 mg/kg Dermal, rat	No information	No information	1.23 mg/l/4h Inhalation ,rat
98-54-4	4-tert-Butylphenol	2990 mg/kg	2318 mg/kg	No information	No information	No information
90-72-2	2,4,6-tris (dimethylaminomethyl)phenol	2000 mg/kg oral		2169 mg/kg oral	>20000	0.000
78-93-3	butanone	2328 mg/kg (oral, rat, female); 2054 mg/kg (oral, rat, male)	5000 mg/kg (dermal, rabbit)	No information	No information	No information
140-31-8	2-piperazin-1-ylethylamine	1999 mg/kg, oral, rat	866 mg/kg, dermal, rabbit	No information	No information	No information
64-17-5	ethanol	10470 mg/kg (oral, rat)	15800 mg/kg (dermal, rat)	>20 mg/L (inhal., vapour, rat)	>20000 ppm	>5.0 mg/L
1330-20-7	xylene	>2000 mg/kg (oral-rat)	1100 mg/kg (ATE dermal-rabbit)	11 mg/L (ATE inh/ vapour)	20001 ppm	>5 mg/l
100-41-4	ethylbenzene	3500 mg/kg rat, oral	5510 mg/kg, rabbit	4000 ppm, rat, 4h	10000 ppm	1.5 mg/L

#### 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. Corrosive to skin. 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

Name According to EEC

CAS-No.

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

Name According to EEC	CAS-No.
4-tert-Butylphenol	98-54-4

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>
39423-51-3	Propylidynetrimethanol, propoxylated, reaction products with ammonia	13 mg/l (daphnia)	No information	>100 mg/l (fish)
100-51-6	Benzyl alcohol	230 mg/L (Daphnia Magna)	770 mg/L (EgC50, Selenastrum capricornutum)	400 mg/L (fish)
694-83-7	1,2-cyclohexanediamine	No information	No information	1825 mg/l (Pimephales promelas)
98-54-4	4-tert-Butylphenol	4,8 mg/l (Daphnia magna; OECD 202)	14 mg/l (Pseudokirchneriella subcapitata; OECD 201)	>1 mg/l (Oncorhynchus mykiss; OECD 203)
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	718 mg/L (EC50, 96h, Palaeomonetes vulgaris)	84 mg/L (EC50, 72h, Desmodemus subspicatus)	
78-93-3	butanone	308 mg/L (Daphnia magna)	2029 mg/L (Pseudokirchneriella subcapitata, EC50, 96h)	2993 mg/L (Pimephales promelas)
140-31-8	2-piperazin-1-ylethylamine	58 mg/l (Daphnia)	1000 mg/l (EC50, Algae)	2190 mg/l (EC50, fish)
64-17-5	ethanol	5012 mg/L (EC50 48h, Daphnia: Ceriodaphnia dubia)	No information	15300 mg/L (EC50, 96h, Pimephales promelas)
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)
100-41-4	ethylbenzene	1.37 mg/l	No information	32 mg/l (Bluegill)

## 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. 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: No Information  
 Packaging Waste Code: No Information

## SECTION 14: Transport Information

	ADR/RID	ADN	IMDG	IATA
<b>14.1 UN-number or ID number</b>	UN3469	UN3469	UN3469	UN3469
<b>14.2 UN proper shipping name</b>	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE
<b>14.3 Transport Hazard Class(es)</b>	3,(8)	3,(8)	3,(8)	3,(8)
<b>14.4 Packing Group</b>	III	III	III	III
<b>14.5 Enviromental Hazards</b>	Environmental Hazard: YES (propylidynetrimethanol, propoxylated, reaction products with ammonia)	Environmental Hazard: YES (propylidynetrimethanol, propoxylated, reaction products with ammonia)	Marine pollutant: YES (propylidynetrimethanol, propoxylated, reaction products with ammonia)	Environmental Hazard: YES (propylidynetrimethanol, propoxylated, reaction products with ammonia)

**14.6 Special precautions for user** Not applicable

EmS-No.: F-E, S-C

**14.7 Maritime transport in bulk according to IMO intruments** 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
Germany WGK Class:	Not available
Directive 2004/42/CE:	500 g/l (subcat j)
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, Regulation (CE) 1907/2006 - Authorisation List:**

<u>CAS-No.</u>	<u>Name According to EEC</u>
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Not Applicable

**SVHC - Substances of very high concern (Candidate List - Art. 59 REACH):**

<u>CAS-No.</u>	<u>Name According to EEC</u>
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98-54-4	4-tert-Butylphenol
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**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.
H311	Toxic in contact with skin.
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.
H361	Suspected of damaging fertility or 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.
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**

Composition Information Changed

Substance and/or Product Properties Changed in Section(s):

- 01 - Identification
- 02 - Hazard Identification
- 03 - Composition/Information On Ingredients
- 08 - Exposure Controls/Personal Protection
- 09 - Physical and Chemical Properties
- 11 - Toxicological Information
- 12 - Ecological Information
- 14 - Transportation Information
- 15 - Regulatory Information

Revision Statement(s) Changed

This Safety Data Sheet (SDS) has been revised to meet the new EU CLP requirements. There have been both formatting and content changes based on the CLP classification (if applicable), please review each section of the SDS for specific changes. .

**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 Ispra, Italy.
- Regulation (EC) 1272/2008 with subsequent amendments.
- Regulation (EC) 1272/2006 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: 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.