



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 | 8320 | Revision Date: | 12/01/2023 |
| Product Name: | CARBOMASTIC 18 FC PART A / CARBOMASTIC 18 FC CARBO- KIT PART A | Supersedes Date: | 01/02/2022 |
| | | Version Number: | 3 |
| UFI Code: | H3F0-90S7-7006-AKV1 | | |
| Nano Form: | No | | |
| 1.2 Relevant identified uses of the substance or mixture and uses advised against | Base component of 2 components coating - Industrial use. Advised against: others than recommended | | |
| Product to be mixed with: | CARBOMASTIC 18 FC PART B / CARBOMASTIC 18 FC CARBO-KIT PART B | | |
| Mixing ratio by volume Part A/ Part B: | 1:1 | | |
| 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: 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 |
| Eye Irritation, category 2 | H319 |
| STOT, repeated exposure, category 2 | H373 |
| Hazardous to the aquatic environment, Chronic, category 2 | H411 |

2.2 Label elements

Symbol(s) of Product



Signal Word

Warning

Named Chemicals on Label

ethylbenzene, xylene, quartz (silicon dioxide), Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700), phenol, styrenated, phenol, methylstyrenated

HAZARD STATEMENTS

| | | |
|---|--------|--|
| Other EU extensions | EUH205 | Contains epoxy constituents. May produce an allergic reaction. |
| 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. |
| Eye Irritation, category 2 | H319 | Causes serious eye irritation. |
| 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. |
| P284 | Wear respiratory protection. |
| P302+352 | IF ON SKIN: Wash with plenty of soap and water. |
| 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.

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

| Name According to EEC EINECS No. CAS-No. REACH Reg No. | % | Classifications | SCL Value | |
|---|-----------|--|-----------|-------------------|
| | | | ATE Value | |
| | | | M-Factor | |
| | | | | |
| Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) 500-033-5 25068-38-6 01-2119456619-26 | 25 - <50 | H315-317-319-411 Aquatic Chronic 2, Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1 | SCL: | H319 ≥ 5 H315 ≥ 5 |
| | | | ATE: | - |
| | | | M-Factor: | - |
| titanium dioxide 236-675-5 13463-67-7 01-2119489379-17 | 10 - <25 | | SCL: | - |
| | | | ATE: | - |
| | | | M-Factor: | - |
| talc 238-877-9 14807-96-6 - | 10 - <25 | | SCL: | - |
| | | | ATE: | - |
| | | | M-Factor: | - |
| xylene 215-535-7 1330-20-7 01-2119488216-32 | 2.5 - <10 | 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 | SCL: | - |
| | | | ATE: | - |
| | | | M-Factor: | - |

| | | | | |
|---|------------|---|------------------|----------------------|
| phenol, methylstyrenated 270-966-8 68512-30-1 01-2119555274-38 | 2.5 - <10 | H315-317-412 Aquatic Chronic 3, Skin Irrit. 2, Skin Sens. 1 | SCL: | - |
| | | | ATE: | - |
| | | | M-Factor: | - |
| quartz (silicon dioxide) - 14808-60-7 - | 1.0 - <2.5 | H372 STOT RE 1 | SCL: | - |
| | | | ATE: | - |
| | | | M-Factor: | - |
| phenol, styrenated 262-975-0 61788-44-1 01-2119980970-27 | 1.0 - <2.5 | H315-317-411 Aquatic Chronic 2, Skin Irrit. 2, Skin Sens. 1 | SCL: | - |
| | | | ATE: | - |
| | | | M-Factor: | - |
| ethylbenzene 202-849-4 100-41-4 01-2119489370-35 | 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 | SCL: | - |
| | | | ATE: | - |
| | | | M-Factor: | - |
| 4-methylpentan-2-one 203-550-1 108-10-1 01-2119473980-30 | 0.1 - <1.0 | H225-319-332-336-351 Acute Tox. 4 Inhalation, Carc. 2, Eye Irrit. 2, Flam. Liq. 2, Skin Cracking, STOT SE 3 NE | SCL: | - |
| | | | ATE: | 11 mg/L (inh-vapour) |
| | | | M-Factor: | - |

Remarks:

CAS No. 25068-38-6 identified as CAS No. 1675-54-3, EC No. 216-823-5 under REACH Registration

CAS No 13463-67-7: Note 10

CAS No. 68512-30-1 identified as EC No. 700-960-7 under REACH Registration

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: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. If eye irritation persists, consult a specialist.

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

May cause sensitization by skin contact. Irritating to eyes and skin.

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

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).

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

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. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. 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. Apply technical measures to comply with the occupational exposure limits (see section 8). People handling polyurethane or epoxy products must have received special training according to guidelines from the National Occupational Health and Safety Board. 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.

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 (UK WELS)

| <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> |
|---|----------------|-----------------|-----------------|-------------------|-------------------|
| Reaction product: bisphenol-A-(epichlorhydrin) 25068-38-6 epoxy resin (number average molecular weight ≤ 700) | | | | | |
| titanium dioxide | 13463-67-7 | | | 10 (total dust) | 4 (resp. dust) |
| talc | 14807-96-6 | | | | 1 |
| xylene | 1330-20-7 | 50 | 100 | 441 | 220 |
| phenol, methylstyrenated | 68512-30-1 | | | | |
| quartz (silicon dioxide) | 14808-60-7 | | | | 0.1 |
| phenol, styrenated | 61788-44-1 | | | | |
| ethylbenzene | 100-41-4 | 100 | 125 | 552 | 441 |
| 4-methylpentan-2-one | 108-10-1 | 50 | 100 | 416 | 208 |

| <u>Name</u> | <u>CAS-No.</u> | <u>OEL Note</u> |
|---|----------------|-----------------|
| Reaction product: bisphenol-A-(epichlorhydrin) 25068-38-6 epoxy resin (number average molecular weight ≤ 700) | | |
| titanium dioxide | 13463-67-7 | |
| talc | 14807-96-6 | |
| xylene | 1330-20-7 | Sk |
| phenol, methylstyrenated | 68512-30-1 | |
| quartz (silicon dioxide) | 14808-60-7 | |

| | | |
|----------------------|------------|----|
| phenol, styrenated | 61788-44-1 | |
| ethylbenzene | 100-41-4 | Sk |
| 4-methylpentan-2-one | 108-10-1 | 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:

Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)

EC No.:
500-033-5

CAS-No.:
25068-38-6

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 | | | | | 0.75 mg/kg bw/day | | 0.75 mg/kg bw/day |
| Inhalation | | 12.25 mg/m3 | | 12.25 mg/m3 | | | | |
| Dermal | | 8.33 mg/kg bw/day | | 8.33 mg/kg bw/day | | 3.571 mg/kg bw/day | | 3.571 mg/kg bw/day |

PNEC's - Predicted no effect concentration

| | |
|------------------------------------|--------------|
| Environmental protection target | PNEC |
| Fresh water | 0.006 mg/l |
| Fresh water sediments | 0.996 mg/L |
| Marine water | 0.0006 mg/l |
| Marine sediments | 0.0996 mg/kg |
| Food chain | |
| Microorganisms in sewage treatment | |
| soil (agricultural) | 0.196 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/m³ | 700 mg/kg bw/day |
| Inhalation | | | 10 mg/m³ | | | | | |
| Dermal | | | | | | | | |

PNEC's - Predicted no effect concentration

| | |
|------------------------------------|-------------------|
| Environmental protection target | PNEC |
| 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:

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 | 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:

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 | | | | | | | 0.2 mg/kg bw/day |
| Inhalation | | | | 1.4 mg/m ³ | | | | 0.35 mg/m ³ |
| Dermal | | | | 0.35 mg/kg bw/day | | | | 1.7 mg/kg bw/day |

PNEC's - Predicted no effect concentration

| Environmental protection target | PNEC |
|------------------------------------|---------------|
| Fresh water | 14 µg/L |
| Fresh water sediments | 1064 mg/kg dw |
| Marine water | 1.4 µg/L |
| Marine sediments | 106 mg/kg dw |
| Food chain | |
| Microorganisms in sewage treatment | |
| soil (agricultural) | 212 mg/kg dw |
| 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/m3 | | | | |
| 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 | |

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:

4-methylpentan-2-one

EC No.:

203-550-1

CAS-No.:

108-10-1

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 | | | | | 115,2 mg/m ³ | | 4.2 mg/kg bw/day |
| Inhalation | 208 mg/m ³ | 208 mg/m ³ | | 83 mg/m ³ | | | | 14,7 mg/m |
| Dermal | | | | 11,8 mg/kg bw/day | | | | 4,2 mg/kg bw/day |

PNEC's - Predicted no effect concentration

| Environmental protection target | PNEC |
|------------------------------------|------------------------|
| Fresh water | 600 µg/L |
| Fresh water sediments | 8.27 mg/kg sediment dw |
| Marine water | 60 µg/L |
| Marine sediments | 0,83 mg/kg sediment dw |
| Food chain | |
| Microorganisms in sewage treatment | |
| soil (agricultural) | 1.3 mg/kg soil dw |
| Air | |

8.2 Exposure controls**Personal Protection**

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

EYE PROTECTION: If splashes are likely to occur, wear: Face-shield, tightly fitting safety goggles (EN 166).

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 | Misc. colours |
| 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) | 114 - 152 |
| Flash Point, (°C) | 26 |
| Evaporation rate | Not determined |
| Flammability (solid, gas) | Not determined |
| Lower and upper explosive limit | 1.0 - 8.0 |
| Vapour Pressure | Not determined |

| | |
|--|---------------------------|
| Relative vapour density | >1 (air = 1) |
| Density and/or relative density | 1,68 |
| Solubility in / Miscibility with water | Negligible |
| Partition coefficient: n-octanol/water | Not determined |
| Auto-ignition temperature (°C) | >432 |
| Decomposition temperature (°C) | Not determined |
| Kinematic viscosity | 115 - 125 KU |
| Particle characteristics | Not applicable to liquids |

9.2 Other information

| | |
|------------------|-----|
| VOC Content g/l: | 130 |
|------------------|-----|

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

| | |
|---------------------------------------|------|
| Specific Gravity (g/cm ³) | 1.70 |
|---------------------------------------|------|

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 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 eyes and skin. |
|-------------|------------------------------|

| | |
|--------------|---------------------------|
| Corrosivity: | No information available. |
|--------------|---------------------------|

| | |
|----------------|--------------------------------------|
| 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: | 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> |
|----------------|---|-------------------------|--------------------------------|--------------------------|---------------------------|------------------------------|
| 25068-38-6 | Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700) | 5000 mg/kg (oral-rat) | >2000 mg/kg (dermal, rat M-F) | No information | No information | No information |
| 13463-67-7 | titanium dioxide | >5000 mg/kg (oral-rat) | 10000 mg/kg | No information | No information | >6.82 mg/L (inh-rat-4h) |
| 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) |
| 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 |
| 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 |
| 108-10-1 | 4-methylpentan-2-one | 2080 mg/kg, (oral, rat) | >2000 mg/kg (dermal, rabbit) | 11 mg/L | 4500 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. This product may contain Quartz (silicon dioxide), which is listed by IARC as a known carcinogenic to humans (Group 1). This classification is relevant when exposed to Quartz (silicon dioxide) in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. Chronic exposure causes drying effect on the skin and eczema. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Repeated skin contact leads to irritation and to sensitisation, possible with cross-sensitisation to other epoxies. 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. The product is irritating to the eyes and may cause sensitisation to the respiratory system. Swallowing concentrated chemical may cause severe internal injury. 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> |
|----------------|---|--|---|--|
| 25068-38-6 | Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700) | 1.8 mg/L (Daphnia magna, EC50, 48h,static) | 11 mg/L (Scenedesmus capricornutum,EC50r, 72h) | 1.5 mg/L (Rainbow trout), 3.6 mg/L (fish) |
| 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) |
| 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) |
| 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 OECD 202) | 3.14 mg/L (ErL50, algae, OECD 201) | 14.8 mg/L (LL50, OECD 203) |
| 100-41-4 | ethylbenzene | 1.8 - 2.4 mg/L (Daphnia magna) | 5.4 mg/L (Pseudokirchneriella subcapitata) | 4.2 mg/L (Oncorhynchus mykissl) |
| 108-10-1 | 4-methylpentan-2-one | >100 mg/L | >100 mg/L | >179 mg/L (Brachydanio rerio, LD50, 96h) |

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: 08 01 11*

Packaging Waste Code: 15 01 10*

SECTION 14: Transport Information

| | ADR/RID | ADN | IMDG | IATA |
|--|---|---|---|---|
| 14.1 UN-number | UN1263 | UN1263 | UN1263 | UN1263 |
| 14.2 UN proper shipping name | PAINT | PAINT | PAINT | PAINT |
| 14.3 Transport Hazard Class(es) | 3 | 3 | 3 | 3 |
| 14.4 Packing Group | III | III | III | III |
| 14.5 Enviromental Hazards | Marine Pollutant: Yes (Bisphenol A epoxy resin) | Marine Pollutant: Yes (Bisphenol A epoxy resin) | Marine Pollutant: Yes (Bisphenol A epoxy resin) | Marine Pollutant: Yes (Bisphenol A epoxy resin) |

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: 1 - 5

Danish MAL Code - Mixture: 2 - 5

Sweden Product Registration Number: Not available

Norway Product Registration Number: P-92427

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 - Annex XIV, Regulation (CE) 1907/2006 - Authorisation List:

| <u>CAS-No.</u> | <u>Name According to EEC</u> |
|----------------|------------------------------|
|----------------|------------------------------|

Not Applicable

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

| <u>CAS-No.</u> | <u>Name According to EEC</u> |
|----------------|------------------------------|
|----------------|------------------------------|

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. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H351 | Suspected of causing cancer. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

Reasons for revision

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) 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 of the product is based on the calculation methods set out in Annex I and Annex II of the CLP Reg. 1272/2008 on the exact 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 |
| 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.