



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 | 11010000 | Revision Date: | 15/05/2017 |
| Product Name: | CARBOGUARD 101 - B | Supersedes Date: | 28/04/2017 |
| | | Version Number: | 1 |
| 1.2 Relevant identified uses of the substance or mixture and uses advised against | Hardener for 2 components coatings - Industrial use. | | |
| Product to be mixed with: | CARBOGUARD 101 - A | | |
| Mixing ratio by volume Part A/ Part B: | 1 / 1 | | |
| 1.3 Details of the supplier of the safety data sheet | | | |
| Importer: | StonCor Europe 9, Rue du Travail - 1400 Nivelles, Belgium | | |
| Manufacturer: | Carboline Italia, S.p.a. Via Margherita Vigano' De Vizzi . n 77 20092 Cinisello Balsamo (MI) Italy | | |
| | Regulatory / Technical Information: +32 67493710 Nivelles, Belgium +39 02253751 Cinisello Balsamo, Italy | | |
| Datasheet Produced by: | Solvesi, Anna - ehs@stoncor.com | | |
| 1.4 Emergency telephone number: | CHEMTREC +1 703 5273887 (Outside US) PPC +1 412 6816669 (Outside US) Centro Antiveleni di Roma +39 06 49978000 (CAV Policlinico Umberto I - Roma)(24h/24h) Emergenza ambientale +39 335-601 32 88 / +39 347-949 84 88 / +39 348-246 90 99 | | |

SECTION 2: Hazard Identification

2.1 Classification of the substance or mixture

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

HAZARD STATEMENTS

| | |
|-------------------------------------|---------|
| Skin drying or cracking | EUH066 |
| Flammable Liquid, category 3 | H226 |
| Skin Corrosion, category 1C | H314-1C |
| Skin Sensitizer, category 1 | H317 |
| STOT, repeated exposure, category 2 | H373 |

Hazardous to the aquatic environment, Chronic, category 3

H412

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

Danger

Named Chemicals on Label

2,4,6-tris(dimethylaminomethyl)phenol, 2-piperazin-1-ylethylamine, 1,2-cyclohexanediamine, xylene, quartz (silicon dioxide)

HAZARD STATEMENTS

| | | |
|-----------------------------------------------------------|---------|--------------------------------------------------------------------|
| Skin drying or cracking | EUH066 | Repeated exposure may cause skin dryness or cracking. |
| 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. |
| STOT, repeated exposure, category 2 | H373 | May cause damage to organs through prolonged or repeated exposure. |
| Hazardous to the aquatic environment, Chronic, category 3 | H412 | Harmful to aquatic life with long lasting effects. |

PRECAUTION PHRASES

| | |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P264 | Wash hands thoroughly after handling. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P302+P352 | IF ON SKIN: Wash with plenty of water and soap. |
| P303+P361+P353 | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. |
| P314 | Get medical advice/attention if you feel unwell. |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

No information

SECTION 3: Composition/Information On Ingredients**3.2 Mixtures****Hazardous Ingredients**

| <u>CAS-No.</u> | <u>EINEC No.</u> | <u>Name According to EEC</u> | <u>%</u> |
|----------------|------------------|----------------------------------------------------------------------|----------|
| 12001-26-2 | 601-648-2 | mica | 10-25 |
| 39423-51-3 | 500-105-6 | Propylidynetrimethanol, propoxylated, reaction products with ammonia | 10-25 |
| 14808-60-7f | 238-878-4 | quartz (silicon dioxide binded within a mineral structure) | 10-25 |
| 14808-60-7 | 238-878-4 | quartz (silicon dioxide) | 2.5-10 |
| 100-51-6 | 202-859-9 | Benzyl alcohol | 2.5-10 |
| 90-72-2 | 202-013-9 | 2,4,6-tris(dimethylaminomethyl)phenol | 2.5-10 |
| 78-93-3 | 201-159-0 | butanone | 1.0-2.5 |

| | | | |
|-----------|-----------|----------------------------|---------|
| 694-83-7 | 211-776-7 | 1,2-cyclohexanediamine | 1.0-2.5 |
| 140-31-8 | 205-411-0 | 2-piperazin-1-ylethylamine | 1.0-2.5 |
| 64-17-5 | 200-578-6 | Ethanol | 1.0-2.5 |
| 1330-20-7 | 215-535-7 | xylene | 1.0-2.5 |
| 98-54-4 | 202-679-0 | 4-tert-Butylphenol | 0.1-1.0 |
| 100-41-4 | 202-849-4 | Ethylbenzene | 0.1-1.0 |

| <u>CAS-No.</u> | <u>REACH Reg No.</u> | <u>CLP Symbols</u> | <u>CLP Hazard Statements</u> | <u>M-Factors</u> |
|----------------|----------------------|--------------------|----------------------------------|------------------|
| 12001-26-2 | | GHS07 | H319-335 | |
| 39423-51-3 | 01-2119556886-20 | GHS05-GHS07-GHS09 | H302-312-318-411 | |
| 14808-60-7f | | | | |
| 14808-60-7 | | GHS08 | H372 | |
| 100-51-6 | 01-2119492630-38 | GHS07 | H302-319-332 | |
| 90-72-2 | 01-2119560597-27 | GHS05-GHS07 | H302-314-317-412 | |
| 78-93-3 | 01-2119457290-43 | GHS02-GHS07 | H225-319-336 | |
| 694-83-7 | | GHS05-GHS07 | H302-312-314-317-332-335 | |
| 140-31-8 | 01-2119471486-30 | GHS05-GHS06-GHS08 | H302-311-314-317-361fd-372-412 | |
| 64-17-5 | 01-2119457610-43 | GHS02-GHS07 | H225-319 | |
| 1330-20-7 | 01-2119488216-32 | GHS02-GHS07-GHS08 | H226-304-312-315-319-332-335-373 | |
| 98-54-4 | 01-2119489419-21 | GHS05-GHS08-GHS09 | H315-318-361f-410 | 1 |
| 100-41-4 | 01-2119489370-35 | GHS02-GHS07-GHS08 | H225-304-332-373-412 | |

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

AFTER INHALATION: Move to fresh air. Consult a physician after significant exposure.

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.

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

AFTER INGESTION: Gently wipe or rinse the inside of the mouth with water. Do NOT induce vomiting. 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

No Information

4.3 Indication of any immediate medical attention and special treatment needed

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

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.

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. High volume water jet. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains.

6.3 Methods and material for containment and cleaning up

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

FURTHER INSTRUCTIONS: 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**

Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Do not breathe vapours or spray mist.

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: Direct sources of heat.

STORAGE CONDITIONS: Store in original container. Keep locked up or in an area accessible only to qualified or authorised persons. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

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 (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> |
|----------------------------------------------------------------------|----------------|-----------------|-----------------|-------------------|-------------------|
| mica | 12001-26-2 | | | 10 (total dust) | 0.8 (resp. dust) |
| Propylidynetrimethanol, propoxylated, reaction products with ammonia | 39423-51-3 | | | | |
| quartz (silicon dioxide binded within a mineral structure) | 14808-60-7f | | | | 0.1 |
| quartz (silicon dioxide) | 14808-60-7 | | | | 0.1 |
| Benzyl alcohol | 100-51-6 | | | | |
| 2,4,6-tris(dimethylaminomethyl)phenol | 90-72-2 | | | | |
| butanone | 78-93-3 | 200 | 300 | 899 | 600 |
| 1,2-cyclohexanediamine | 694-83-7 | | | | |
| 2-piperazin-1-ylethylamine | 140-31-8 | | | | |
| Ethanol | 64-17-5 | 1000 | | | 1920 |
| xylene | 1330-20-7 | 50 | 100 | 441 | 220 |
| 4-tert-Butylphenol | 98-54-4 | | | | |
| Ethylbenzene | 100-41-4 | 100 | 125 | 552 | 441 |

| <u>Name</u> | <u>CAS-No.</u> | <u>OEL Note</u> |
|----------------------------------------------------------------------|----------------|-----------------|
| mica | 12001-26-2 | |
| Propylidynetrimethanol, propoxylated, reaction products with ammonia | 39423-51-3 | |
| quartz (silicon dioxide binded within a mineral structure) | 14808-60-7f | |
| quartz (silicon dioxide) | 14808-60-7 | |
| Benzyl alcohol | 100-51-6 | |

| | | |
|---------------------------------------|-----------|----|
| 2,4,6-tris(dimethylaminomethyl)phenol | 90-72-2 | |
| butanone | 78-93-3 | Sk |
| 1,2-cyclohexanediamine | 694-83-7 | |
| 2-piperazin-1-ylethylamine | 140-31-8 | |
| Ethanol | 64-17-5 | |
| xylene | 1330-20-7 | Sk |
| 4-tert-Butylphenol | 98-54-4 | |
| 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.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: In case of insufficient ventilation wear suitable respiratory equipment. Respirator with combination filter for vapour/particulate (EN 141). Respirator with filter for organic vapor.

EYE PROTECTION: Tightly fitting safety goggles. Face-shield. Safety glasses with side-shields conforming to EN166.

HAND PROTECTION: Rubber or plastic gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. 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). Protective gloves complying with EN 374. Long sleeved clothing. Remove and wash contaminated clothing before re-use. Rubber or plastic apron.

OTHER PROTECTIVE EQUIPMENT: No Information

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

Chemical Name:

Propylidynetrimehanol, 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 ³ | | | | 0.8 mg/kg bw/day |
| Dermal | | | | 1.6 mg/kg bw/day | | | | 3.48 mg/m ³ |

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 | | | | | 25 mg/Kg bw/day | | 5 mg/Kg bw/day |
| Inhalation | | 110 mg/m ³ | | 22 mg/m ³ | | 40.55 mg/m ³ | | 8.11 mg/m ³ |
| Dermal | | 40 mg/kg bw/day | | 8 mg/kg bw/day | | 28.5 mg/Kg bw/day | | 5.7 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 wwt |
| Marine water | 0.1 mg/l |
| Marine sediments | 0.527 mg/Kg wwt |
| Food chain | |
| Microorganisms in sewage treatment soil (agricultural) | 39 mg/l |
| Air | 0.456 mg/Kg wwt |

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/m ³ | 0.31 mg/m ³ | | | | |
| Dermal | | | | | | | | |

PNEC's - Predicted no effect concentration

| | |
|--------------------------------------------------------|-------------|
| Environmental protection target | PNEC |
| Fresh water | 0.084 mg/l |
| Fresh water sediments | |
| Marine water | 0.0084 mg/l |
| Marine sediments | |
| Food chain | |
| Microorganisms in sewage treatment soil (agricultural) | 0.2 mg/l |
| 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 |
| Inhalation | | | | 600 mg/m ³ | | | | 106 mg/m ³ |
| Dermal | | | | 1161 mg/kg | | | | 412 mg/kg |

PNEC's - Predicted no effect concentration

| Environmental protection target | PNEC |
|--------------------------------------------------------|--------------|
| Fresh water | 55.8 mg/l |
| Fresh water sediments | 284.74 mg/kg |
| Marine water | |
| Marine sediments | 284.7 mg/kg |
| Food chain | |
| Microorganisms in sewage treatment soil (agricultural) | 22.5 mg/kg |
| 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 ³ | 0,5 mg/m ³ | 0,25 mg/m ³ | 0,25 mg/m ³ | | | | |
| 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:

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 soil (agricultural) | 82.2 mg/l |
| Air | 42.9 mg/kg dwt |

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 |
| Inhalation | 1900 mg/m3 | | | 950 mg/m3 | 950 mg/m3 | | | 114 mg/m3 |
| Dermal | | | | 343 mg/kg | | | | 206 mg/kg |

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 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 ³ | 289 mg/m ³ | | 77 mg/m ³ | 174 mg/m ³ | 174 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 soil (agricultural) | 6.58 mg/L |
| Air | 2.31 mg/kg |

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

| Environmental protection target | PNEC |
|--------------------------------------------------------|------|
| Fresh water | |
| Fresh water sediments | |
| Marine water | |
| Marine sediments | |
| Food chain | |
| Microorganisms in sewage treatment soil (agricultural) | |
| 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 | | | | | | | 1.6 mg/kg bw/day |
| Inhalation | 293 mg/m ³ irritation (respiratory tract) | Low hazard (no threshold derived) | | 77 mg/m ³ | | Low hazard (no threshold derived) | | 15 mg/m ³ |
| Dermal | | | | 180 mg/kg bw/day | | | | |

PNEC's - Predicted no effect concentration

| Environmental protection target | PNEC |
|------------------------------------|------------------------|
| Fresh water | 100 µg/L |
| Fresh water sediments | 13.7 mg/kg sediment dw |
| Marine water | 10 - 100 µg/L |
| Marine sediments | 1.37 mg/kg sediment dw |
| Food chain | |
| Microorganisms in sewage treatment | |
| soil (agricultural) | 2.68 mg/kg soil dw |
| Air | |

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

| | |
|-----------------------------------------------------|----------------|
| Appearance: | viscous liquid |
| Physical State | LIQUID |
| Odor | AMINE |
| Odor threshold | Not determined |
| pH | N/A |
| Melting point / freezing point (°C) | Not determined |
| Boiling point/range (°C) | Not determined |
| Flash Point, (°C) | 57 |
| Evaporation rate | Not determined |
| Flammability (solid, gas) | Not determined |
| Upper/lower flammability or explosive limits | Not determined |
| Vapour Pressure | N/D |
| Vapour density | Not determined |
| Relative density | Not determined |
| Solubility in / Miscibility with water | N/D |
| Partition coefficient: n-octanol/water | Not determined |
| Auto-ignition temperature (°C) | Not determined |
| Decomposition temperature (°C) | Not determined |
| Viscosity | Not determined |
| Explosive properties | Not determined |

Oxidising properties Not determined

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/cm³) 1.61

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

Hazardous polymerisation may occur.

10.4 Conditions to avoid

Direct sources of heat.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: No Information

Inhalation LC50: No Information

Irritation: No information available.

Corrosivity: No information available.

Sensitization: No information available.

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> |
|----------------|------------------------------|--------------------|--------------------|-------------------|
| 12001-26-2 | mica | > 5000 mg/kg (rat) | | |

| | | | | |
|------------|----------------------------------------------------------------------|------------------------|----------------------------|-----------------------------------|
| 39423-51-3 | Propylidynetrimethanol, propoxylated, reaction products with ammonia | 550 mg/kg rat | >1000 mg/kg rat | |
| 100-51-6 | Benzyl alcohol | 1230 mg/kg rat | 2980 mg/kg, rabbit | |
| 90-72-2 | 2,4,6-tris(dimethylaminomethyl)phenol | 2169 mg/kg oral, rat | 2110 mg/kg rabbit | |
| 78-93-3 | butanone | 2737 mg/kg rat, oral | 6480 mg/kg (dermal-rabbit) | 5000 ppm/1 hour rat, inhalation |
| 694-83-7 | 1,2-cyclohexanediamine | 1170 mg/kg, rat, oral | 1870 mg/kg Dermal,rat | |
| 140-31-8 | 2-piperazin-1-ylethylamine | 1999 mg/kg, oral, rat | 866 mg/kg, dermal, rabbit | |
| 64-17-5 | Ethanol | 7060 mg/kg, oral, rat | | 20000 ppm/10 hrs, rat, inhalation |
| 1330-20-7 | xylene | >2000 mg/kg, rat, oral | 3200 mg/kg, rabbit, dermal | 20 mg/L (inh/vapour/rat) |
| 98-54-4 | 4-tert-Butylphenol | >2000 mg/kg | 5600 mg/kg | |
| 100-41-4 | Ethylbenzene | 3500 mg/kg rat, oral | >20000 mg/kg bw (rabbit) | |

Additional Information:

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.

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:

No information

12.6 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> |
|----------------|----------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------|-------------------------------------------|
| 12001-26-2 | mica | No information | No information | |
| 39423-51-3 | Propylidynetrimethanol, propoxylated, reaction products with ammonia | No information | No information | > 100 mg/l (fish) |
| 14808-60-7f | quartz (silicon dioxide binded within a mineral structure) | No information | No information | |
| 14808-60-7 | quartz (silicon dioxide) | No information | No information | |
| 100-51-6 | Benzyl alcohol | 400 mg/L (daphnia magna) | 700 mg/L (algae) | 10 mg/L (fish) |
| 90-72-2 | 2,4,6-tris(dimethylaminomethyl)phenol | No information | 84mg/l (EC50, 72h, Scendesmus subspicatus) | 175 mg/L (LC50, 96h, Cyprinus carpio) |
| 78-93-3 | butanone | 5091 mg/L | No information | 3.22 mg/L (Lepomis macrochirus) |
| 694-83-7 | 1,2-cyclohexanediamine | No information | No information | 1825 mg/l (LC50, 96h Pimephales promelas) |
| 140-31-8 | 2-piperazin-1-ylethylamine | No information | 1000 mg/l (EC50,72h, Algae) | 2190 mg/l (EC50, 96h, fish) |
| 64-17-5 | Ethanol | 5012 mg/l (EC50 48h, Daphnia: Ceriodaphnia dubia) | No information | 15,3 g/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) |
| 98-54-4 | 4-tert-Butylphenol | 3.4 to 4.5 mg/l | 2.4 mg/l | 4.71 to 5.62 mg/l |
| 100-41-4 | Ethylbenzene | No information | No information | 5.1 mg/L (Atlantic silverfish) |

Further Ecological Information

Contains the following ingredients which are classified as water dangerous according to EEC directive No. 76/464/EEC in percentages > 1%.

| <u>CAS-No.</u> | <u>Name According to EEC</u> |
|----------------|---------------------------------------------------------------------|
| 39423-51-3 | Propylidynetrimehanol, propoxylated, reaction products with ammonia |
| 90-72-2 | 2,4,6-tris(dimethylaminomethyl)phenol |
| 140-31-8 | 2-piperazin-1-ylethylamine |

SECTION 13: Disposal Considerations

13.1 WASTE TREATMENT METHODS: If recycling is not practicable, dispose of in compliance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

European Waste Code: 080111*
Packaging Waste Code: 150110

SECTION 14: Transport Information

| | | |
|------|--------------------------------------------------------------------------|------------------------------|
| 14.1 | UN number | UN 3470 |
| 14.2 | UN proper shipping name | .PAINT, CORROSIVE, FLAMMABLE |
| | Technical name | Not applicable |
| 14.3 | Transport hazard class(es) | 8 (3) |
| | Subsidiary shipping hazard | 3 |
| 14.4 | Packing group | II |
| 14.5 | Environmental hazards | MARINE POLLUTANT: NO |
| 14.6 | Special precautions for user | Not applicable |
| | EmS-No.: | F-E, S-C |
| 14.7 | Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code | Not applicable |

SECTION 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation for the substance or mixture:

National Regulations:

| | |
|---------------------------------------------|-------------------|
| Denmark Product Registration Number: | Not available |
| Danish MAL Code: | Not available |
| Danish MAL Code - Mixture: | Not available |
| Sweden Product Registration Number: | Not available |
| Norway Product Registration Number: | Not available |
| WGK Class: | 2 |
| Directive 2004/42/CE : | 50 g/l (subcat j) |

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. |
| H361f | Suspected of damaging fertility. |
| H361fd | Suspected of damaging fertility. Suspected of damaging the unborn child. |
| 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

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

01 - Identification

02 - Hazard Identification

Composition Information Changed

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;
 European Union Commission Regulation No. 1907/2006 on REACH as amended within Commission Regulation (EU) 2015/830;
 European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) and subsequent technical progress adaptations (ATP);
 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 |
| RTI | Respiratory Tract Irritation |
| NE | Narcotic Effects |

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.

