Safety Data Sheet according to Regulation (EC) No. 453/2010



1. Identification of the Substance/Mixture and the Company/Undertaking

1.1 Product Identifier EP8880700 Revision Date: 17/11/2015

Product Name: Carboguard 888 Gry 0700 Supercedes Date: New SDS

1.2 Relevant identified uses of the substance or mixture and uses

advised against

Base component of 2 components coatings - Industrial use.

1.3 Details of the supplier of the safety data sheet

Importer: None

Manufacturer: StonCor Middle East L.L.C.

Plot # B518, Al Quoz Industrial Area 3

P.O. Box: 3034 Dubai, U.A.E.

Regulatory / Technical Information:

+971 4 347 0460 +971 4 347 0242 (fax)

Datasheet Produced by: Valderrama, Maja - ehs@stoncor.com

1.4 Emergency telephone number: CHEMTREC +1 703 5273887 (Outside US)

+ 971 50 455 7641 (Richard D'Souza - Technical

Director)

+ 971 50 657 81 21 (N. Kumaresh - Operations

Manager

2. Hazard Identification

2.1 Classification of the substance or mixture

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

HAZARD STATEMENTS

Hazardous to the aquatic environment, Chronic, category 2

Eye Irritation, category 2

H319

Flammable Liquid, category 2

H225

Skin Irritation, category 2 H315 Skin Sensitizer, category 1 H317

2.2 Label elements

Symbol(s) of Product







Signal Word

Danger

Named Chemicals on Label

reaction product: bisphenol-a-(epichlorohydrin) epoxy resin (number average molecularweight <= 700)

HAZARD STATEMENTS

| Hazardous to the aquatic environment, Chronic, category 2 | H411 | Toxic to aquatic life with long lasting effects. |
|--|--------------|---|
| Eye Irritation, category 2 | H319 | Causes serious eye irritation. |
| Flammable Liquid, category 2 | H225 | Highly flammable liquid and vapour. |
| Skin Irritation, category 2 | H315 | Causes skin irritation. |
| Skin Sensitizer, category 1 | H317 | May cause an allergic skin reaction. |
| PRECAUTION PHRASES | | |
| | P210 | Keep away from heat/sparks/open flames/hot surfaces No smoking. |
| | P235 | Keep cool. |
| | P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| | P273 | Avoid release to the environment. |
| | P280 | Wear protective gloves/protective clothing/eye protection/ face protection. |
| | P302+352 | IF ON SKIN: Wash with plenty of soap and water. |
| | P305+351+338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. |
| | P333+313 | If skin irritation or rash occurs: Get medical advice/attention. |
| | P391 | Collect spillage. |
| | P403+233 | Store in a well-ventilated place. Keep container tightly closed. |

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.

3. Composition/Information On Ingredients

3.2 Mixtures

Hazardous Ingredients

| CAS-No. | EINEC No. | Name According to EEC | <u>%</u> |
|------------|-----------|--|----------|
| 14807-96-6 | | talc | 25-50 |
| 25068-38-6 | 500-033-5 | reaction product: bisphenol-a- (epichlorohydrin) epoxy resin (number average molecularweight <= 700) | 10-25 |
| 13463-67-7 | 236-675-5 | titanium dioxide | 10-25 |
| 108-38-3 | 203-576-3 | m-xvlene | 2.5-10 |

| 7779-90-0 | 231-944-3 | trizinc bis(orthophosphate) | 2.5-10 |
|-----------|-----------|-----------------------------|---------|
| 108-10-1 | 203-550-1 | 4-methylpentan-2-one | 2.5-10 |
| 108-88-3 | 203-625-9 | toluene | 2.5-10 |
| 78-83-1 | 201-148-0 | 2-methylpropan-1-ol | 0.1-1.0 |
| 50-00-0 | 200-001-8 | formaldehyde | <0.1 |

| CAS-No. | REACH Reg No. | CLP Symbols | CLP Hazard Statements | M-Factors |
|------------|---------------------------|-----------------------------------|---|-----------|
| 14807-96-6 | | | | |
| 25068-38-6 | 01-2119456619-26- 0029 | GHS07-GHS09 | H315-317-319-335-411 | |
| 13463-67-7 | 01-2119489379-17- 0117 | | | |
| 108-38-3 | | GHS02-GHS07 | H226-312-315-332 | |
| 7779-90-0 | | GHS07-GHS09 | H302-400-410 | |
| 108-10-1 | | GHS02-GHS07 | H225-319-332-335 | |
| 108-88-3 | | GHS02-GHS07-GHS08 | H225-304-315-336-361-373 | |
| 78-83-1 | | GHS02-GHS05-GHS07 | H226-315-318-335-336 | |
| 50-00-0 | | GHS02-GHS05-GHS06-GHS08- GHS09 | H226-301-311-314-317-331-334-335-341-350- | 400 |

Additional Information: The text for CLP Hazard Statements shown above (if any) is given in Section 16.

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.

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.

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. Give small amounts of water to drink. 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

Toxic if swallowed. Irritating to eyes, respiratory system and skin.

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.

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

Flash back possible over considerable distance. In the event of fire, wear self-contained breathing apparatus. Water sprayDry powderAlcohol-resistant foamCarbon dioxide (CO2)Do not use a solid water stream as it may scatter and spread fire. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental precautions

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

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.

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). Vapours may form explosive mixtures with air. 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. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment. Do not breathe vapours or spray mist. Use only explosion-proof equipment. Keep away from sources of ignition - No smoking. 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.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits

(EU)

| Name | <u>%</u> LTI | EL ppm | STEL ppm | STEL mg/m3 | LTEL mg/m3 | OEL Note |
|---|--------------|--------|----------|------------|------------|----------|
| talc | 25-50 | | | | | |
| reaction product: bisphenol-a-(epichlorohydrin) epoxy resin (number average molecularweight <= 700) | 10-25 | | | | | |
| titanium dioxide | 10-25 | | | | | |
| m-xylene | 2.5-10 | 50 | 100 | 442 | 221 | SKIN |
| trizinc bis(orthophosphate) | 2.5-10 | | | | | |
| 4-methylpentan-2-one | 2.5-10 | 20 | 50 | 208 | 83 | |
| toluene | 2.5-10 | 50 | 100 | 384 | 192 | |
| 2-methylpropan-1-ol | 0.1-1.0 | | | | | |
| formaldehyde | <0.1 | | | | | |

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified at the EU level under the dangerous substances and preparations regulation.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: Respirator with a vapor filter.

EYE PROTECTION: Tightly fitting safety goggles.

HAND PROTECTION: Rubber or plastic gloves. 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). 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:

reaction product: bisphenol-a-(epichlorohydrin) epoxy resin (number average molecularweight <= 700)

EC No.: CAS-No.: 500-033-5 25068-38-6

DNELs - Derived no effect level

| | Workers | | | | Consumers | | | |
|------------|--------------|-------------------------|---------------|-------------------------|--------------|---------------|---------------|-----------------|
| Route of | Acute effect | Acute effects | Chronic | Chronic effects | Acute effect | Acute effects | Chronic | Chronic effects |
| Exposure | local | systemic | effects local | systemic | local | systemic | effects local | systemic |
| Oral | | Not | required | | | 0.75 mg/kg | | 0.75 mg/kg |
| Inhalation | | 12.25 mg/m ³ | | 12.25 mg/m ³ | | | | |
| Dermal | | 8.33 mg/kg | | 8.33 mg/kg | | 3.571 mg/kg | | 3.571 mg/kg |

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/l |
| Food chain | |
| Microorganisms in sewage treatment | 10 mg/l |
| soil (agricultural) | 0.196 mg/kg |
| Air | |

Chemical Name:

titanium dioxide

EC No.: CAS-No.: 236-675-5 13463-67-7

DNELs - Derived no effect level

| | Workers | | | Consumers | | | | |
|------------|--------------|---------------|---------------|-----------------|--------------|---------------|---------------|-----------------|
| Route of | Acute effect | Acute effects | Chronic | Chronic effects | Acute effect | Acute effects | Chronic | Chronic effects |
| Exposure | local | systemic | effects local | systemic | local | systemic | effects local | systemic |
| Oral | | Not required | | | | | | 700 mg/kg/d |
| Inhalation | | | 10 | | | | | |
| Dermal | | | | | | | | |

PNEC's - Predicted no effect concentration

| Environmental protection target | PNEC |
|------------------------------------|----------|
| Fresh water | 0.127 |
| Fresh water sediments | 1000 |
| Marine water | 1 |
| Marine sediments | 100 |
| Food chain | 1667 |
| Microorganisms in sewage treatment | 100 mg/l |
| soil (agricultural) | 100 |
| Air | |

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Viscous liquid, various colors

Physical State Liquid
Odor Solvent

Odor threshold

PH

Not determined

Not determined

Melting point / freezing point (°C)

Not determined

Boiling point/range (°C)

80 - 204

Flash Point, (°C)

Evaporation rate Slower than ether
Flammability (solid, gas) Not determined

1 - 7.5

Upper/lower flammability or explosive

limits

Vapour Pressure

Vapour density

Relative density

Not determined

Solubility in / Miscibility with water

Partition coefficient: n-octanol/water

Auto-ignition temperature (°C)

Not determined

Not determined

Not determined

Viscosity

Explosive properties Not determined

Oxidising properties Not determined

9.2 Other information

VOC Content g/l: 330

Specific Gravity (g/cm3) 1.500

10. Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under recommended storage conditions. Risk of ignition.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not 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 (NOx), dense black smoke.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50:

Inhalation LC50:

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:

| CAS-No. | Name According to EEC | Oral LD50 | Dermal LD50 | Vapor LC50 |
|------------|--|--|------------------|---------------------------------|
| 25068-38-6 | reaction product: bisphenol-a- (epichlorohydrin) epoxy resin (number average molecularweight <= 700) | >2000 mg/kg, rat, oral | >2000 mg/kg, rat | |
| 13463-67-7 | titanium dioxide | 10000 mg/m3, oral (rat) | | |
| 7779-90-0 | trizinc bis(orthophosphate) | 552 mg/kg, oral rat | | |
| 108-10-1 | 4-methylpentan-2-one | 2080 mg/kg, oral, rat | | 5000 ppm / 1 hour, rat |
| 108-88-3 | toluene | 5000 mg/kg rat oral, 14000 mg/kg rabbit dermal | | 8000 ppm/4 hrs, rat, inhalation |
| 50-00-0 | formaldehyde | 100 mg/kg, oral, rat | | 250 - 590 mg/cu m |

Additional Information:

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.

12. Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):

IC50 72hr (Algae):

No information

No information

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

assessment:

12.6 Other adverse effects: No information

| CAS-No. | Name According to EEC | EC50 48hr | IC50 72hr | LC50 96hr |
|------------|--|---|----------------|--------------|
| 14807-96-6 | talc | No information | No information | |
| 25068-38-6 | reaction product: bisphenol-a- (epichlorohydrin) epoxy resin (number average molecularweight <= 700) | 1.8 mg/l | No information | 1.5-7.7 mg/L |
| 13463-67-7 | titanium dioxide | >100 mg/l (EC50, 48h, Daphnia magna OECD202)ation | No information | >1000 mg/l |
| 108-38-3 | m-xylene | No information | No information | |
| 7779-90-0 | trizinc bis(orthophosphate) | No information | No information | |
| 108-10-1 | 4-methylpentan-2-one | No information | No information | |
| 108-88-3 | toluene | No information | No information | |
| 78-83-1 | 2-methylpropan-1-ol | No information | No information | |
| 50-00-0 | formaldehyde | No information | No information | |

Further Ecological Information

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

CAS-No. Name According to EEC

25068-38-6 reaction product: bisphenol-a-(epichlorohydrin) epoxy resin (number average

molecularweight <= 700)

13. Disposal Considerations

13.1 WASTE TREATMENT METHODS: Do not burn, or use a cutting torch on, the empty drum. 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: 08.01.11
Packaging Waste Code: 150110

14. Transport Information

14.1 UN number UN 126314.2 UN proper shipping name Paint

Technical name

14.3 Transport hazard class(es) 3

Subsidiary shipping hazard

14.4 Packing group

14.5 Environmental hazards

14.6 Special precautions for user Not applicable

EmS-No.:

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

Not applicable

15. Regulatory Information

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

National Regulations:

Denmark Product Registration Number:

Danish MAL Code:

Sweden Product Registration Number:

Norway Product Registration Number:

WGK Class:

Chemical Safety Assessment:

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

16. Other Information

Text for CLP Hazard Statements shown in Section 3 describing each ingredient:

| H225 H226 | Highly flammable liquid and vapour. Flammable liquid and vapour. |
|--------------|--|
| H301 | Toxic if swallowed. |
| 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. |
| H331 | Toxic if inhaled. |
| H332 | Harmful if inhaled. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H341 | Suspected of causing genetic defects. |

H350 May cause cancer.

H361 Suspected of damaging fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.H411 Toxic to aquatic life with long lasting effects.

Reasons for revision

This is a new Safety Data Sheet (SDS).

List of References:

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

The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark

ESIS (The European Chemical Substances Information System), provided by the European Commission

Joint Research Centre in Ispra, Italy

Annex VI of the EU Council Directive 67/548/EEC

Council Directive 67/548/EEC - Annex I or EU Council Directive 1999/45/EC

European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of

substances and mixtures (CLP Regulation)

EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"

Acronym & Abbreviation Key:

CLP Classification, Labeling & Packaging Regulation

EC European Commission
EU European Union
US United States

CAS Chemical Abstract Service

EINECS European Inventory of Existing Chemical Substances

REACH Registration, Evaluation, Authorization of Chemicals Regulation

GHS Globally Harmonized System of Classification and Labeling of Chemicals

LTEL Long term exposure limit
STEL Short term exposure limit
OEL Occupational exposure limit

ppm Parts per million

mg/m3 Milligrams per cubic meter TLV Threshold Limit Value

ACGIH American Conference of Governmental Industrial Hygienists

OSHA Occupational Safety & Health Administration

PEL Permissible Exposure Limits
VOC Volatile organic compounds

g/l Grams per liter

mg/kg Milligrams per kilogram

N/A Not applicable LD50 Lethal dose at 50%

LC50 Lethal concentration at 50%

EC50 Half maximal effective concentration
IC50 Half maximal inhibitory concentration
PBT Persistent bioaccumulative toxic chemical
VPVB Very persistent and very bioaccumulative

EEC European Economic Community

ADR International Transport of Dangerous Goods by Road RID International Transport of Dangerous Goods by Rail

UN United Nations

IMDG International Maritime Dangerous Goods Code
IATA International Air Transport Association

MARPOL International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978

IBC International Bulk Container

For further information, please contact: Technical Services Department

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