



## Safety Data Sheet

prepared to UN GHS Revision 3

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

<b>1.1 Product Identifier</b>	CAR400 PART B	<b>Revision Date:</b>	06/07/2018
<b>Product Name:</b>	CAR 400 Super Metal Paste Part B	<b>Supersedes Date:</b>	15/08/2017
<b>1.2 Relevant identified uses of the substance or mixture and uses advised against</b>	Hardener for 2 components coatings - Industrial use.		
<b>1.3 Details of the supplier of the safety data sheet</b>			
<b>Importer:</b>	Importer		
<b>Manufacturer:</b>	StonCor Africa (Pty.) Ltd. 8 Cresset Road Midrand Industrial Park, Chloorkop P.O. Box 2205 2001, Johannesburg South Africa		
	Regulatory / Technical Information: +27 11 254 5500		
<b>Datasheet Produced by:</b>	Maritz, Rory - ehs@stoncor.com		
<b>1.4 Emergency telephone number:</b>	CHEMTREC 1-800-424-9300 (Inside US) CHEMTREC +1 703 5273887 (Outside US)		

### 2. Hazard Identification

#### 2.1 Classification of the substance or mixture

Carcinogenicity, category 2  
Skin Corrosion, category 1  
Skin Sensitizer, category 1

#### 2.2 Label elements

##### Symbol(s) of Product



##### Signal Word

Danger

##### Named Chemicals on Label

Triethylenetetramine, Tetraethylenepentamine, benzene-1, 3-dimethanamine, titanium dioxide

##### HAZARD STATEMENTS

Skin Corrosion, category 1	H314-1	Causes severe skin burns and eye damage.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Carcinogenicity, category 2	H351	Suspected of causing cancer.
<b>PRECAUTION PHRASES</b>		
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P264	Wash hands thoroughly after handling.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P284	Wear respiratory protection.
	P301+330+331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P302+352	IF ON SKIN: Wash with plenty of soap and water.
	P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	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.
	P308+313	IF exposed or concerned: Get medical advice/attention.
	P333+313	If skin irritation or rash occurs: Get medical advice/attention.
	P363	Wash contaminated clothing before reuse.

**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**

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>%</u>
13463-67-7	titanium dioxide	10-25
104-15-4	P-toluenesulphonic acid (containing a maximum of 5 % H2SO4)	2.5-10
1477-55-0	benzene-1, 3-dimethanamine	2.5-10
919-30-2	3-aminopropyltriethoxysilane	2.5-10
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	1.0-2.5
112-24-3	Triethylenetetramine	1.0-2.5
112-57-2	Tetraethylenepentamine	1.0-2.5
21645-51-2	alumina trihydrate	0.1-1.0
64742-95-6	Solvent naphtha (petroleum), light arom.	0.1-1.0

<u>CAS-No.</u>	<u>GHS Symbols</u>	<u>GHS Hazard Statements</u>	<u>M-Factors</u>
13463-67-7	GHS08	H351	0
104-15-4	GHS07	H315-319-335	0
1477-55-0	GHS05-GHS06	H302-314-317-331-412	0
919-30-2	GHS05-GHS07	H302-314	0
90-72-2	GHS07	H315-319	0
112-24-3	GHS05-GHS06	H311-314-317-412	0
112-57-2	GHS05-GHS07	H302-312-314-317	0
21645-51-2			0
64742-95-6	GHS08-GHS09	H304-411	0

**Additional Information:** The text for GHS 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. Call a physician or poison control centre 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.**AFTER EYE CONTACT:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. 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. 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**

WARNING! FLAMMABLE. HARMFUL IF INHALED. CAUSES EYE AND SKIN IRRITATION. ASPIRATION MAY CAUSE LUNG DAMAGE. MAY CAUSE DIZZINESS AND DROWSINESS. KEEP AWAY FROM HEAT, SPARKS, FLAME. AVOID BREATHING VAPOR. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. DO NOT SWALLOW. KEEP CONTAINER CLOSED. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING.

**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 (CO<sub>2</sub>)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**

Should not be released into the environment. Do not allow material to contaminate ground water system. Prevent product from entering drains.

**6.3 Methods and material for containment and cleaning up**

Pick up and transfer to properly labelled containers. 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 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**

**INSTRUCTIONS 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. Avoid contact with skin and clothing.

**PROTECTION AND HYGIENE MEASURES:** 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 container tightly closed in a dry and well-ventilated place. 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)

<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>
titanium dioxide	13463-67-7				
P-toluenesulphonic acid (containing a maximum of 5 % H2SO4)	104-15-4				
benzene-1, 3-dimethanamine	1477-55-0				
3-aminopropyltriethoxysilane	919-30-2				
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2				
Triethylenetetramine	112-24-3				
Tetraethylenepentamine	112-57-2				
alumina trihydrate	21645-51-2				
Solvent naphtha (petroleum), light arom.	64742-95-6				

<u>Name</u>	<u>CAS-No.</u>	<u>OEL Note</u>
titanium dioxide	13463-67-7	
P-toluenesulphonic acid (containing a maximum of 5 % H2SO4)	104-15-4	
benzene-1, 3-dimethanamine	1477-55-0	
3-aminopropyltriethoxysilane	919-30-2	
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	
Triethylenetetramine	112-24-3	
Tetraethylenepentamine	112-57-2	
alumina trihydrate	21645-51-2	
Solvent naphtha (petroleum), light arom.	64742-95-6	

**FURTHER INFORMATION:** Refer to the regulatory exposure limits for the workforce enforced in each country.

### 8.2 Exposure controls

#### Personal Protection

**RESPIRATORY PROTECTION:** Respirator with a vapor filter. Respirator with filter for organic vapor.

**EYE PROTECTION:** Tightly fitting safety goggles.

**HAND PROTECTION:** Impervious 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.

## 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

<b>Appearance:</b>	Viscous Liquid
<b>Physical State</b>	Liquid
<b>Odor</b>	Amine
<b>Odor threshold</b>	Not determined
<b>pH</b>	Alkaline
<b>Melting point / freezing point (°C)</b>	Not determined
<b>Boiling point/range (°C)</b>	220 - N.D.
<b>Flash Point, (°C)</b>	>89
<b>Evaporation rate</b>	Slower than ether
<b>Flammability (solid, gas)</b>	Not determined
<b>Upper/lower flammability or explosive limits</b>	Not determined
<b>Vapour Pressure</b>	Not determined
<b>Vapour density</b>	Heavier than air
<b>Relative density</b>	1.57 - 1.61
<b>Solubility in / Miscibility with water</b>	Slightly
<b>Partition coefficient: n-octanol/water</b>	Not determined
<b>Auto-ignition temperature (°C)</b>	Not determined
<b>Decomposition temperature (°C)</b>	Not determined
<b>Viscosity</b>	Not determined
<b>Explosive properties</b>	Not determined
<b>Oxidising properties</b>	Not determined

### 9.2 Other information

<b>VOC Content g/l:</b>	Refer to Part A MSDS
<b>Calculated grams of VOC per liter of coating product as applied.</b>	
<b>Specific Gravity (g/cm<sup>3</sup>)</b>	1.592

## 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 (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke.

## 11. Toxicological Information

### 11.1 Information on toxicological effects

#### Acute Toxicity:

**Oral LD50:** No information available.

**Inhalation LC50:** No information available.

**Irritation:** No information available.

**Corrosivity:** No information available.

**Sensitization:** No information available.

**Repeated dose toxicity:** No information available.

**Carcinogenicity:** This product contains one or more carcinogenic substances. See hazard classification and precautionary statements in Section 2 for further information.

**Mutagenicity:** No information available.

**Toxicity for reproduction:** 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.	Chemical Name	Oral LD50	Dermal LD50	Vapor LC50	Gas LC50
13463-67-7	titanium dioxide	10000 mg/m3, oral (rat)			0.000
1477-55-0	benzene-1, 3-dimethanamine	1514 mg/kg, oral			0.000
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	2169 mg/kg oral			0.000
112-24-3	Triethylenetetramine	2500 mg/kg rat, oral	805 mg/kg		0.000
64742-95-6	Solvent naphtha (petroleum), light arom.	4700 mg/kg, oral, rat	>2000 mg/kg	3670 ppm/8 hours, rat, inhalation	0.000

#### 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):** No information

**IC50 72hr (Algae):** No information

**LC50 96hr (fish):** No information

**12.2 Persistence and degradability:** No information

**12.3 Bioaccumulative potential:** No information

**12.4 Mobility in soil:** No information

**12.5 Results of PBT and vPvB assessment:** The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

**12.6 Other adverse effects:** No information

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
13463-67-7	titanium dioxide	>100 mg/l (EC50, 48h, Daphnia magna OECD202)ation	No information	>1000 mg/l
104-15-4	P-toluenesulphonic acid (containing a maximum of 5 % H2SO4)	No information	No information	
1477-55-0	benzene-1, 3-dimethanamine	No information	No information	
919-30-2	3-aminopropyltriethoxysilane	No information	No information	
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	No information	No information	
112-24-3	Triethylenetetramine	No information	No information	
112-57-2	Tetraethylenepentamine	No information	No information	
21645-51-2	alumina trihydrate	No information	No information	
64742-95-6	Solvent naphtha (petroleum), light arom.	>1 - 10 mg/l	>1 - 10 mg/l	>10-100 mg/l

### 13. Disposal Considerations

**13.1 WASTE TREATMENT METHODS:** It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations. 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.

### 14. Transport Information

14.1	UN number	UN 3066
14.2	UN proper shipping name	Paint
	Technical name	Not applicable
14.3	Transport hazard class(es)	8
	Subsidiary shipping hazard	Not applicable
14.4	Packing group	PG II
14.5	Environmental hazards	Not applicable
14.6	Special precautions for user	Not applicable
	EmS-No.:	Not applicable
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:	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:	Not available

**15.2 Chemical Safety Assessment:**

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

## 16. Other Information

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

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.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

**Reasons for revision**

Composition Information Changed

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

09 - Physical and Chemical Properties

11 - Toxicological Information

14 - Transportation Information

15 - Regulatory Information

Revision Statement(s) Changed

**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/m <sup>3</sup>	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.