



## Safety Data Sheet

prepared to UN GHS Revision 3

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

1.1	<b>Product Identifier</b>	700-0001	<b>Revision Date:</b>	20/12/2018
	<b>Product Name:</b>	Carbozinc 11 Part A	<b>Supersedes Date:</b>	12/02/2018
1.2	<b>Relevant identified uses of the substance or mixture and uses advised against</b>	Coating - Industrial use		
1.3	<b>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		
1.4	<b>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

Acute Toxicity, Inhalation, category 4  
Eye Irritation, category 2  
Flammable Liquid, category 2  
Skin Irritation, category 2

#### 2.2 Label elements

##### Symbol(s) of Product



##### Signal Word

Danger

##### Named Chemicals on Label

Tetraethyl orthosilicate, 2-butoxyethanol

##### HAZARD STATEMENTS

Flammable Liquid, category 2	H225	Highly flammable liquid and vapour.
Skin Irritation, category 2	H315	Causes skin irritation.
Eye Irritation, category 2	H319	Causes serious eye irritation.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.

**PRECAUTION PHRASES**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P235	Keep cool.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P332+313	If skin irritation occurs: Get medical advice/attention.
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**

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>%</u>
64-17-5	Ethanol	25 - <50
1332-58-7	kaolin	10 - <25
111-76-2	2-butoxyethanol	10 - <25
67-63-0	Propan-2-ol	10 - <25
78-10-4	Tetraethyl orthosilicate	2.5 - <10
141-78-6	Ethyl acetate	1.0 - <2.5
13463-67-7	titanium dioxide	0.1 - <1.0

<u>CAS-No.</u>	<u>GHS Symbols</u>	<u>GHS Hazard Statements</u>	<u>M-Factors</u>
64-17-5	GHS02-GHS07	H225-319	0
1332-58-7			0
111-76-2	GHS07	H302-312-315-319-332	0
67-63-0	GHS02-GHS07	H225-319-336	0
78-10-4	GHS02-GHS06	H226-319-331-335	0
141-78-6	GHS02-GHS07	H225-319-336	0
13463-67-7	GHS08	H351	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:** No Information**AFTER INHALATION:** Move to fresh air. Keep respiratory tract clear.**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. 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.

**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 mist/Dry powder/Foam/Carbon 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.

**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**

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). Electrical equipment should be protected to the appropriate standard. Use only in area provided with appropriate exhaust ventilation. Provide exhaust ventilation close to floor level. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment. Open drum carefully as content may be under pressure. Use only explosion-proof equipment.

**PROTECTION AND HYGIENE MEASURES:** Keep working clothes separately. Keep away from food, drink and animal feedingstuffs. When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice for diagnostics.

**7.2 Conditions for safe storage, including any incompatibilities**

**CONDITIONS TO AVOID:** Direct sources of heat.

**STORAGE CONDITIONS:** Keep in an area equipped with solvent resistant flooring. 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>
Ethanol	64-17-5				
kaolin	1332-58-7				
2-butoxyethanol	111-76-2	20	50	246	98
Propan-2-ol	67-63-0				
Tetraethyl orthosilicate	78-10-4	5			44
Ethyl acetate	141-78-6	200	400	1468	734
titanium dioxide	13463-67-7				

<u>Name</u>	<u>CAS-No.</u>	<u>OEL Note</u>
Ethanol	64-17-5	
kaolin	1332-58-7	
2-butoxyethanol	111-76-2	SKIN
Propan-2-ol	67-63-0	
Tetraethyl orthosilicate	78-10-4	
Ethyl acetate	141-78-6	
titanium dioxide	13463-67-7	

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

### 8.2 Exposure controls

#### Personal Protection

**RESPIRATORY PROTECTION:** Preferably a compressed airline breathing apparatus. Vapours are heavier than air and can cause suffocation by reducing oxygen available for breathing. Respirator with filter for organic vapor.

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

**HAND PROTECTION:** Solvent-resistant gloves. Remove and wash contaminated clothing before re-use. Flame retardant antistatic protective clothing

**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>	Liquid
<b>Physical State</b>	Liquid
<b>Odor</b>	Organic Solvent
<b>Odor threshold</b>	Not determined
<b>pH</b>	Solvent Based
<b>Melting point / freezing point (°C)</b>	Not determined

<b>Boiling point/range (°C)</b>	77 - N.D.
<b>Flash Point, (°C)</b>	13
<b>Evaporation rate</b>	Not determined
<b>Flammability (solid, gas)</b>	Flammable Liquid
<b>Upper/lower flammability or explosive limits</b>	0.9 - 19
<b>Vapour Pressure</b>	Not determined
<b>Vapour density</b>	Not determined
<b>Relative density</b>	1.030-1.060
<b>Solubility in / Miscibility with water</b>	Insoluble
<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>	55-70 kU
<b>Explosive properties</b>	Not determined
<b>Oxidising properties</b>	Not determined

## 9.2 Other information

<b>VOC Content g/l:</b>	396
<b>Calculated grams of VOC per liter of coating product as applied.</b>	
<b>Specific Gravity (g/cm3)</b>	1.045

## 10. Stability and Reactivity

### 10.1 Reactivity

No reactivity hazards known under normal storage and use conditions. Explosive reaction may occur on heating or burning.

### 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

Do not store together with oxidizing and self-igniting products. 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

Inhalation LC50: No information

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:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>	<u>Gas LC50</u>	<u>Dust/Mist LC50</u>
64-17-5	Ethanol	7060 mg/kg, oral, rat		20000 ppm/10 hrs, rat, inhalation	0.000	0.000
111-76-2	2-butoxyethanol	1746 mg/kg, rat, oral		700 ppm/7hrs mouse, inhalation	0.000	0.000
67-63-0	Propan-2-ol	4720 mg/kg rat, oral		22500 ppm/8hrs rat, inhalation	0.000	0.000
78-10-4	Tetraethyl orthosilicate	>2000mg/kg rat, oral		>7.5 mg/L 4 hrs. rat, inhalation	0.000	0.000
141-78-6	Ethyl acetate	5600 mg/kg oral, rat		56000 mg/l/4h. (rat)	0.000	0.000
13463-67-7	titanium dioxide	10000 mg/m3, oral (rat)			0.000	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>
64-17-5	Ethanol	No information	No information	
1332-58-7	kaolin	No information	No information	
111-76-2	2-butoxyethanol	No information	No information	
67-63-0	Propan-2-ol	No information	No information	
78-10-4	Tetraethyl orthosilicate	No information	No information	
141-78-6	Ethyl acetate	No information	No information	
13463-67-7	titanium dioxide	>100 mg/l (EC50, 48h, Daphnia magna OECD202)ation	No information	>1000 mg/l

### 13. Disposal Considerations

- 13.1 WASTE TREATMENT METHODS:** Do not burn, or use a cutting torch on, the empty drum. Dispose of as hazardous waste in compliance with local and national regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport Information

- 14.1 UN number** UN 1263
- 14.2 UN proper shipping name** Paint or paint related materials (All the cargo products (Part A & B) are components of paint)
- Technical name** Not applicable
- 14.3 Transport hazard class(es)** 3
- Subsidiary shipping hazard** Not applicable
- 14.4 Packing group** 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:**

<b>Denmark Product Registration Number:</b>	Not available
<b>Danish MAL Code:</b>	Not available
<b>Danish MAL Code - Mixture:</b>	Not available
<b>Sweden Product Registration Number:</b>	Not available
<b>Norway Product Registration Number:</b>	Not available
<b>WGK Class:</b>	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:**

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.

**Reasons for revision**

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

- 02 - Hazard Identification
- 08 - Exposure Controls/Personal Protection
- 14 - Transportation Information

Substance Hazard Threshold % Changed

Substance Regulatory CAS Number Changed

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.