Safety Data Sheet

prepared to UN GHS Revision 3

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

1.1 Product Identifier

879-0098

Revision Date: 05/07/2018

Supercedes Date: 26/07/2017

Product Name: Carbozinc 879 Part B

1.2 Relevant identified uses of the substance or mixture and uses advised against

Component of multicomponent industrial coatings - Industrial use.

1.3 Details of the supplier of the safety data sheet

Importer: Importer

Manufacturer:

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

Datasheet Produced by: Maritz, Rory - ehs@stoncor.com

1.4 Emergency telephone number:

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
Hazardous to the aquatic environment, Chronic, category 2
Flammable Liquid, category 2
Reproductive Toxicity, category 2
STOT, repeated exposure, category 2
STOT, single exposure, category 3, NE
Skin Corrosion, category 1
Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product

Signal Word

Danger

Named Chemicals on Label

4-tert-Butylphenol, Benzyl alcohol, Toluene, 2-piperazin-1-ylethylamine, benzene-1, 3-dimethanamine, 01,5-pentanediamine, 2-methyl-

HAZARD STATEMENTS

Flammable Liquid, category 2	H225	Highly flammable liquid and vapour.
Skin Corrosion, category 1	H314-1	Causes severe skin burns and eye damage.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
STOT, single exposure, category 3, NE	H336	May cause drowsiness or dizziness.
Reproductive Toxicity, category 2	H361	Suspected of damaging fertility or the unborn child.
STOT, repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic to aquatic life with long lasting effects.

PRECAUTION PHRASES

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P235	Keep cool.
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.
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.
P314	Get medical advice/attention if you feel unwell.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
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.	Chemical Name	%
64742-95-6	Solvent naphtha (petroleum), light arom.	25-50
108-88-3	Toluene	10-25
100-51-6	Benzyl alcohol	2.5-10
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	2.5-10
98-54-4	4-tert-Butylphenol	2.5-10
1477-55-0	benzene-1, 3-dimethanamine	2.5-10
140-31-8	2-piperazin-1-ylethylamine	1.0-2.5
15520-10-2	01,5-pentanediamine, 2-methyl-	1.0-2.5
64742-88-7	Solvent naphtha (petroleum), medium aliph.	0.1-1.0

CAS-No.	GHS Symbols	GHS Hazard Statements	M-Factors
64742-95-6	GHS08-GHS09	H304-411	0
108-88-3	GHS02-GHS07-GHS08	H225-304-315-336-361-373	0
100-51-6	GHS07	H302-312-319-332	0
90-72-2	GHS07	H315-319	0
98-54-4	GHS05-GHS07-GHS08-GHS09	H315-318-335-361-411	0
1477-55-0	GHS05-GHS06	H302-314-317-331-412	0
140-31-8	GHS05-GHS07	H312-314-317-412	0
15520-10-2	GHS05-GHS07	H302-314-332	0
64742-88-7	GHS08	H304	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.
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. If eye irritation persists, consult a specialist.
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

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. Do not use a solid water stream as it may scatter and spread fire.

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. 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. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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). 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. Provide sufficient air exchange and/or exhaust in work rooms. 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.
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 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	CAS-No.	LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3
Solvent naphtha (petroleum), light arom.	64742-95-6				
Toluene	108-88-3	50	100	384	192
Benzyl alcohol	100-51-6				
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2				
4-tert-Butylphenol	98-54-4				
benzene-1, 3-dimethanamine	1477-55-0				
2-piperazin-1-ylethylamine	140-31-8				
01,5-pentanediamine, 2-methyl-	15520-10-2				
Solvent naphtha (petroleum), medium aliph.	64742-88-7				

Name	CAS-No.	OEL Note
Solvent naphtha (petroleum), light arom.	64742-95-6	
Toluene	108-88-3	
Benzyl alcohol	100-51-6	
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	
4-tert-Butylphenol	98-54-4	
benzene-1, 3-dimethanamine	1477-55-0	
2-piperazin-1-ylethylamine	140-31-8	
01,5-pentanediamine, 2-methyl-	15520-10-2	
Solvent naphtha (petroleum), medium aliph.	64742-88-7	

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.

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.

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

Appearance:	Amber Liquid
Physical State	Liquid
Odor	Solvent
Odor threshold	Not determined
pH	Not determined
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	110 - 180
Flash Point, (°C)	9
Evaporation rate	Slower than ether
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	0.8 - 7.1
Vapour Pressure	Not determined
Vapour density	Heavier than air
Relative density	0.90 - 0.94
Solubility in / Miscibility with water	Not determined
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: Refer to Part A MSDS

Calculated grams of VOC per liter of coating product as applied.

Specific Gravity (g/cm3) 0.923

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
No Information

10.4 Conditions to avoid
Direct sources of heat.

10.5 Incompatible materials
Keep away from strong oxidizing agents, heat and open flames. 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:	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.

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
64742-95-6	Solvent naphtha (petroleum), light arom.	4700 mg/kg, oral, rat	>2000 mg/kg	3670 ppm/8 hours, rat, inhalation	0.000
108-88-3	Toluene	5000 mg/kg rat oral, 14000 mg/kg rabbit dermal		8000 ppm/4 hrs, rat, inhalation	0.000

100-51-6	Benzyl alcohol	1230 mg/kg, rat	2000 mg/kg, rabbit	1000 ppm, rat	0.000
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	2169 mg/kg oral			0.000
98-54-4	4-tert-Butylphenol	>2000 mg/kg	5600 mg/kg		0.000
1477-55-0	benzene-1, 3-dimethanamine	1514 mg/kg, oral			0.000
140-31-8	2-piperazin-1-ylethylamine	2140 mg/kg, oral, rat			0.000
64742-88-7	Solvent naphtha (petroleum), medium aliph.	>2000 mg/kg, oral, rat			0.000

Additional Information:
No Information

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

CAS-No.	Chemical Name	EC50 48hr	IC50 72hr	LC50 96hr
64742-95-6	Solvent naphtha (petroleum), light arom.	>1 - 10 mg/l	>1 - 10 mg/l	>10-100 mg/l
108-88-3	Toluene	No information	No information	
100-51-6	Benzyl alcohol	230 mg/l	700 mg/l	460 mg/l
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	No information	No information	
98-54-4	4-tert-Butylphenol	3.4 to 4.5 mg/l	2.4 mg/l	4.71 to 5.62 mg/l
1477-55-0	benzene-1, 3-dimethanamine	No information	No information	
140-31-8	2-piperazin-1-ylethylamine	No information	No information	
15520-10-2	01,5-pentanediamine, 2-methyl-	No information	No information	
64742-88-7	Solvent naphtha (petroleum), medium aliph.	No information	No information	

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.

14. Transport Information

14.1	UN number	UN 3469
14.2	UN proper shipping name	Paint, Flammable, Corrosive
	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:

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:

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
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.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Reasons for revision

Substance and/or Product Properties Changed in Section(s):
08 - Exposure Controls/Personal Protection
14 - Transportation Information
15 - Regulatory Information
Substance Hazard Threshold % 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/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.