

## Selection & Specification Data

<b>Generic Type</b>	Two component abrasion resistant epoxy novolac paste.
<b>Description</b>	CAR 200 is a solvent-free epoxy novolac ceramic sphere system for the re-profiling of steel surfaces subject to abrasion. CAR 200 can be overcoated with CAR 100 to provide a smooth surface that will improve flow and equipment efficiency. CAR 200 may be applied in a single coat application at 3 to 5mm without slumping. Multiple coats with steel reinforced mesh will be necessary in extreme circumstances.
<b>Features</b>	<ul style="list-style-type: none"> <li>- Quick repair and lining of steel surfaces exposed to sliding type abrasion</li> <li>- Can be applied by trowel, spatula or gloved hand on screw conveyors, hoppers, pump casings, wear plates, etc.</li> <li>- Excellent abrasion resistance</li> <li>- Applied over suitably prepared steel surfaces</li> <li>- Not recommended for engine components</li> </ul>
<b>Colour</b>	Charcoal
<b>Finish</b>	Semi-Gloss (Epoxies lose gloss and eventually chalk in sunlight exposure)
<b>Dry Film Thickness</b>	3 to 5mm
<b>Solids Content</b>	By Volume 100%
<b>Theoretical Coverage Rate</b>	6kg/m <sup>2</sup> at 3mm dry film thickness
	<b>NOTE:</b> Material losses during mixing and application will vary and must be taken into consideration when estimating job requirements.
<b>Temperature Resistance</b>	Most aqueous solutions    45°C Non-immersion                70°C Performance is dependent on actual chemical exposure. Refer to StonCor Africa Technical Department.
<b>Abrasion Resistance</b>	Excellent
<b>Substrates</b>	Apply over suitably prepared steel surfaces.

## Substrates & Surface Preparation

<b>General</b>	Remove all oil or grease from surface to be coated prior to abrasive blast, power or hand-tool cleaning.
<b>Steel</b>	<p>Ensure that the surface is dry and free from all contaminants. Dry abrasive blast to a near white metal finish in accordance with ISO 8501 Sa2½ to obtain a roughened angular profile between 75 and 125 microns.</p> <p>For mild environments, power tool clean in accordance with ISO 8501 St3 to produce a roughened rust-scale free bright steel surface.</p>
<b>Crevice Filling</b>	Remove all embedded contamination such as dust, dirt, rust, etc. from crevice by means of high pressure grit-assisted water washing. Angle grind edges to remove rust and other foreign materials. Ensure that the surface is dry and free from dust or any other contaminants.

## Performance Data

Consistency	5.0mm No sag
Cured Density	2.30 kg/l
Compressive Strength	75 MPa
Tensile Shear Adhesion at 25°C	3.5 MPa
Tensile Shear Adhesion at 70°C	2.0 MPa
Shore D Hardness	95

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## Application Equipment

**Application** Using a trowel, spatula or gloved hand, apply a thin layer to wet out the substrate before applying the paste to the desired thickness. Use the trowel with a water dampened sponge or a mist of water from a spray bottle onto the CAR 200 to smooth the surface. If mixed material is left in the container, it will become unusable within 60 minutes, depending on temperature. If further build-up of coating is required, light abrasive blast or grind the cured surface to create a rough profile for improved adhesion. For controlling the application thickness and giving additional support, tack-weld a reinforcing mesh onto the steel surface and bed the CAR 200 into the mesh. This is essential when vibrations and thermal movements are encountered. Clean equipment immediately after use with Brush Cleaner and rinse off in clean water. Post curing at 60°C for 4 hours will accelerate the cure rate to full cure status. This process must be carried out in a gradual increase and subsequent decrease in temperature so as not to shock the system.

## Mixing & Thinning

**Mixing** For best results, the contents of both tubs should be mixed together for approximately 4 to 5 minutes using a round nose gauging trowel or putty knife.

**Thinning** Do not thin.

**Pot Life** 40 to 60 Minutes at 25°C and less at higher temperatures. Pot life ends when paste becomes too viscous to use.

## Application Conditions

Condition	Material	Surface	Ambient	Humidity
Normal	16-29°C	16-29°C	16-29°C	0-85%
Minimum	16°C	16°C	10°C	0%
Maximum	32°C	32°C	40°C	85%

Do not apply when the surface temperature is less than 2°C above the dew point.

Do not attempt to install material if temperatures of material and substrate are not within 16 to 32°C. The cure time and application properties of the material are severely affected by temperature changes. Do not use if chemical spills or steam are in the vicinity of the application. Contaminants can seriously affect the working time and other properties. Do not add thinners to the system. Full cure will not be achieved and performance will be affected.

Avoid contact with Parts A and B as they may cause skin and/or eye irritation. Workmen should cover hands with protective creams and rubber gloves. Use only with adequate ventilation.

## Curing Schedule

Surface Temp. & 50% Relative Humidity	Dry to Touch	Dry to Handle	Final Cure	Overcoating
25°C	2-3 Hours	6-8 Hours	36-48 Hours	8-16 Hours

## Cleanup & Safety

**Cleanup** Use Brush Cleaner and water.

**Safety** Read and follow all caution statements on this product data sheet and on the material safety data sheet for this product. Employ normal workmanlike safety precautions.

**Ventilation** While this is a solventless epoxy, it is common practice when used in enclosed areas to circulate during and after application until the coating is cured. Follow all OSHA requirements for respirator use.

**Caution** Read and follow all caution statements on this product data sheet.

## Packaging, Handling & Storage

<b>Shipping Weight (Approximate)</b>	Parts A & B	1.0kg
	Brush Cleaner	4.6kg
<b>Flash Point (Pensky)</b>	Part A	>93°C
<b>Martens Closed Cup)</b>	Part B	>93°C
	Brush Cleaner	22°C
<b>Storage Temperature &amp; Humidity</b>	10 to 35°C	
	0 to 90%	
	Store indoors	
<b>Shelf Life</b>	Part A	36 Months
	Part B	36 Months

**\*Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.**



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