

## Selection & Specification Data

<b>Generic Type</b>	Solventless, three-component, aggregate-filled, cross-linked epoxy.
<b>Description</b>	Carboguard 695 PM is a solventless, epoxy surfacer or patching mortar that is used to transition between floor-wall chine areas, lapwelded plates, rivets, etc. It is typically used with a reinforced mat system specifically designed to comply with API RP652 for thick-film tank bottom lining repairs. It is suitable for exposures in water, crude oil, aromatic distillates, and unblended gasolines. It is typically applied by broadknife, spatula, trowel, brush, or other suitable tool that allows heavy applications and smoothing procedures. Excellent surfacer / patching mortar for concrete tanks & floors.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Solventless, high performance protection</li> <li>• Low-to-no odour</li> <li>• Easy to apply by hand tools</li> <li>• Excellent chemical resistance</li> <li>• Fast cure</li> <li>• Tough abrasion resistant film</li> <li>• Excellent flexibility</li> <li>• Excellent corrosion protection</li> <li>• Impact resistant</li> <li>• Flexural strength (&gt;5000 psi)</li> <li>• Hi-build application</li> <li>• Low temperature cure (-2°C)</li> </ul>
<b>Gloss</b>	Gloss to low-sheen testured finish* (*gloss varies with level of Filler #50)
<b>Colour</b>	Clear to Pale Olive / Grey* (*colour varies with level of Filler #50)
<b>Primers</b>	Self-Priming or Phenoline 311 as a holding primer on steel
<b>Dry Film Thickness</b>	6mm to 12mm thick (in a single application)
<b>Solids Content</b>	By Volume: 99% ± 1%
<b>Theoretical Coverage Rate</b>	10 m <sup>2</sup> /l at 100 microns 1m <sup>2</sup> at 1mm thick Allow for loss in mixing and application.
<b>Mix Ratio</b>	3:1:6 (Part A : Part B : Part C)
<b>VOC Values</b>	As supplied: 7 g/l Thinning is not required or recommended.
<b>Dry Temp. Resistance</b>	Continuous: 121°C Non-Continuous: 149°C Discolouration and loss of gloss is observed above 93°C.

## Substrates & Surface Preparation

<b>General</b>	Remove all oil or grease from the surface to be coated with clean rags soaked in Thinner 2 or Carboline Surface Cleaner 3 (refer to Surface Cleaner 3 instructions) in accordance with SSPCSP1. For girth weld areas, all burrs, weld slag and other matter shall be removed to achieve a smoother surface prior to blasting.
<b>Steel</b>	This material is used to repair steel bottom storage tanks which are typically pitted and may have severe loss of steel. Heavy pits need to be filled in with a suitable putty or resin while other areas may need steel plate over-layment or replacement. Abrasive blast to a Near White Metal Finish in accordance with AS 1627.4 Class 2½ (SSPC-SP 10) and obtain a 75 micron blast profile. If the blasted steel cannot be coated before it begins to flash rust, a holding primer Phenoline 311 should be used.
<b>Rivets, Coving, Lap Seams, Chine Areas</b>	Follow surface preparation for steel (above). Even out these abrupt transitions using a suitable hand tool to apply this material.
<b>Concrete</b>	Clean and dry. Remove all loose, unsound concrete. Do not apply coating unless concrete has cured at least 28 days @ 21°C and 50% RH or equivalent. Prepare surfaces in accordance with ASTM D4258 Surface Cleaning of Concrete and ASTM D4259 Abrading Concrete. Voids in concrete may require filling/surfacing.

## Performance Data

Exposure	Splash & Spillage
Acids	Very Good
Alkalis	Excellent
Solvents	Very Good
Salt	Excellent
Water	Excellent

## Application Equipment

This product may be applied using brush, roller, spatula, broad-knife, or trowel.

# Carboguard 695<sup>®</sup> PM

## Mixing & Thinning

**Mixing** Premix each liquid component separately, than add together Part B into Part A and mix until uniform. Then slowly add Filler # 50 until homogenous.

**Ratio** **Kit (1.5 gals total)**  
Part A: 0.75 gal  
Part B: 0.25 gal  
Part C: 1.50 gal (Filler # 50) – bulk volume

**Thinning** Not recommended

**Pot Life** 60 minutes (1.5 gals kit) at 27°C. The pot life ends when the material becomes too viscous to use.

## Cleanup & Safety

**Cleanup** Use Thinner #2 or Acetone. In case of spillage, absorb and dispose of in accordance with local applicable regulations.

**Safety** Read and follow all caution statements on this product data sheet and on the MSDS for this product. Employ normal workmanlike safety precautions. Hypersensitive persons should wear protective clothing, gloves and use protective cream on face, hands and all exposed areas.

**Ventilation** While this is a solventless epoxy, it is common practice when used as a tank lining or in enclosed areas to circulate the air during and after application until the coating is cured. Minimal protection is needed when proper ventilation is achieved. The ventilation system should be capable of preventing any solvent vapour concentration from reaching the lower explosion limit for any solvents that may be present. User should test and monitor exposure levels to insure all personnel are below guidelines. If not sure or if not able to monitor levels, use OSH approved supplied air respirator.

**Caution** This product may contain flammable solvents if thinned. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the local Electric Code. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

## Application & Application Conditions

1. Follow mixing instructions above.
2. Use suitable tool (trowel, broad-knife, brush, spatula, etc, to apply and smooth mixed material over substrate.
3. Apply in chine areas, over rivets, lap welds, etc, to minimize sharp edges or smooth out abrupt terminations/transitions.
4. Material will be firm enough for over-coating in 8 hrs at 24°C.

### Application Conditions

Condition	Material	Surface	Ambient	Humidity
Normal	27°C	16°-29°C	16°-29°C	40-80%
Minimum	27°C	2°C	2°C	0%
Maximum	32°C	43°C	43°C	80%

This product requires the substrate temperature to be above the dew point. Condensation due to substrate temperatures below the dew point can cause flash rusting on prepared steel and interfere with proper adhesion to the substrate. Special application techniques may be required above or below normal application conditions.

## Curing Schedule

Surface Temperature & 50% Relative Humidity	Dry to Over-Coat
2°C	48 hours
10°C	24 hours
24°C	8 hours
38°C	4 hours

Insufficient heat or cooler temperatures will require longer cure times. This product has a very high tolerance for moisture during cure; however excessive humidity or condensation on the surface may cause discolouration and may result in a surface haze. Any haze or blush must be removed by water washing if recoating.

## Packaging, Handling & Storage

**Shipping Weight (Approximate)** 1.5 US Gallon Kit  
7.7 kg (17 lbs)

**Flash Point (Setaflash)** Part A: 96°C  
Part B: 110°C  
Part C: None

**Storage Temperature & Humidity** Store under cover. KEEP DRY  
4°- 43°C  
0-80% Relative Humidity

**Shelf Life** Part A: 24 months at 24°C  
Part B: 18 months at 24°C  
Part C: 24 months at 24°C

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

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An **RPM** Company

Issued May 2009 – Metric version ex US February '08

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