

## Selection & Specification Data

<b>Generic Type</b>	Cycloaliphatic Amine Epoxy
<b>Description</b>	High solids, high-build potable water coating widely used for lining interior steel and concrete tanks, valves and pipes. Formulated for application at conventional builds (100 to 150µm per coat) as well as high builds (250µm per coat).
<b>Features</b>	<ul style="list-style-type: none"> <li>- Excellent film build and edge protection.</li> <li>- VOC compliant to current AIM regulations.</li> <li>- Meets or exceeds all requirements of: AWWA D102 Inside System 1 and 2; AWWA C210 for use on interior of steel water pipes; Complies with FDA 21CFR 175.300</li> </ul>
<b>Colour</b>	White & Pipe Blue
<b>Finish</b>	Gloss
<b>Primer</b>	Self-priming
<b>Topcoats</b>	Acrylics, Alkyds, Epoxies, Polyurethanes for non-immersion applications.
<b>Dry Film Thickness</b>	100 to 250µm per coat
<b>Solids Content</b>	By volume 75% ± 2%
<b>Theoretical Coverage Rate</b>	6.0m <sup>2</sup> /litre at 125µm Allow for loss in mixing and application
<b>VOC Values</b>	As supplied: 214g/l Thinned 6% with Thinner # 2: 249g/l Thinned 13% with Thinner # 33: 285g/l These are nominal values and may vary slightly with colour. * Maximum thinning for 250g/l restricted areas is 5% for Thinner # 33. Use Thinner # 76 up to 5% where non-photochemically reactive solvent is required.
<b>Dry Temp Resistance</b>	Continuous: 121°C Non-Continuous: 149°C Discolouration and loss of gloss occurs above 93°C.
<b>Water Temp Resistance</b>	Immersion temperature resistance depends upon exposure. Consult Carboline Technical Service for specific information. It is recommended that metal tanks operating above 60°C be insulated.
<b>Limitations</b>	Epoxies lose gloss, discolour and eventually chalk in sunlight exposure.
<b>Glass Flake</b>	Carboguard 890 Glass Flake Part C may be added to improve film properties. Film builds up to 500 microns may be achieved. Consult StonCor Africa for specific recommendations.

## Substrates & Surface Preparation

<b>General</b>	Surfaces must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating.	
<b>Steel</b>	<b>Immersion:</b>	ISO 8501 Sa2½
	<b>Non-Immersion:</b>	ISO 8501 Sa2
	<b>Surface Profile:</b>	40 to 75 microns
<b>Concrete</b>	<b>Immersion:</b>	Concrete must be cured 28 days at 25°C and 50% relative humidity or equivalent. Prepare surfaces in accordance with ASTM D4258 Surface Cleaning of Concrete and ASTM D4259 Abrading Concrete. Voids in concrete may require surfacing.

## Performance Data

Test Method	System	Results	Report #
Pencil Hardness (ASTM D3363)	Blasted Steel 2 cts. 891	3H	03457
Specification AWWA C210	Blasted Steel 2 cts. 891	Pass	03457

Test reports and additional data available upon written request.

## Application Equipment

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

<b>Spray Application (General)</b>	This is a high solids coating and may require adjustments in spray techniques. Wet film thickness is easily and quickly achieved. The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.
<b>Conventional Spray</b>	Pressure pot equipped with dual regulators, 10mm I.D. minimum material hose, 1.8mm I.D. fluid tip and appropriate air cap.
<b>Airless Spray</b>	Pump Ratio: 45:1 (min)* GPM Output: 3.0 (min) Material Hose: 10mm I.D. (min) Tip Size: .017-.021" Output PSI: 2100-2300 Filter Size: 60 Mesh * Teflon packings are recommended and available from the pump manufacturer. Use 45:1 pump ratio for elevated applications and 8mm I.D. for hose lengths greater than 20m.
<b>Brush &amp; Roller (General)</b>	Not recommended for tank lining applications except when striping welds. Multiple coats may be required to obtain desired appearance, recommended dry film thickness and adequate hiding.  Avoid excessive re-brushing or re-rolling. For best results, tie-in within 10 minutes at 25°C.
<b>Brush</b>	Use a medium bristle brush.
<b>Roller</b>	Use a short-nap synthetic roller cover with phenolic core.

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## Mixing & Thinning

<b>Mixing</b>	Power mix separately, then combine and power mix. DO NOT MIX PARTIAL KITS.
<b>Thinning</b>	Spray: Up to 6% with Thinner # 2 Brush: Up to 13% with Thinner # 33 Roller: Up to 13% with Thinner # 33  Use of thinners other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether expressed or implied. * See VOC values for thinning limits.
<b>Ratio</b>	1:1 Ratio (A to B)
<b>Pot Life</b>	Material begins to lose film build in 90 minutes at 25°C, and less at higher temperatures.

## Application Conditions

Condition	Material	Surface	Ambient	Humidity
Normal	16°C - 29°C	16°C - 29°C	16°C - 32°C	0-80%
Minimum	10°C	10°C	10°C	0%
Maximum	32°C	52°C	43°C	80%

This product simply 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 Temp & 50% Relative Humidity	Dry to Recoat	Dry to Recoat & Topcoat with other finishes	Final Cure for Immersion Service	Maximum Recoat Time
10°C	12 Hours	24 Hours	N/R	60 Days
16°C	8 Hours	16 Hours	10 Days	30 Days
24°C	4 Hours	8 Hours	5 Days	30 Days
32°C	2 Hours	4 Hours	3 Days	15 Days

These times are based on a 100 to 150 micron dry film thickness. Higher film thicknesses, insufficient ventilation or cooler temperatures will require longer cure times and could result in solvent entrapment and premature failure. Excessive humidity or condensation on the surface during curing can interfere with the cure, can cause discoloration and may result in a surface haze. Any haze or blush must be removed by water washing before recoating. If the maximum recoat time is exceeded, the surface must be abraded by sweep blasting or sanding prior to the application of additional coats. For force curing, contact StonCor Africa Technical Service for specific requirements. \* **NOTE:** Final cure temperatures below 16°C are not recommended for tank linings.

## Cleanup & Safety

<b>Cleanup</b>	Use Thinner # 2. In case of spillage, absorb and dispose of in accordance with local applicable regulations.
<b>Safety</b>	Read and follow all caution statements on this product data sheet and on the material safety data sheets 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.
<b>Ventilation</b>	When used as a tank lining or in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used. 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 MSHA/NIOSH approved respirator.
<b>Caution</b>	This product contains flammable solvents. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

## Packaging, Handling & Storage

<b>Shelf Life</b>	Part A: Min 36 months at 25°C Part B: Min 6 months at 25°C  * When kept at recommended storage conditions and in original unopened containers.
<b>Shipping Weight (Approximate)</b>	10 Litre Kit Part A = 7,43kg Part B = 8,68kg
<b>Storage Temperature &amp; Humidity</b>	4°C to 43°C 0-100% Relative Humidity
<b>Flash Point (Setaflash)</b>	Part A: 24°C Part B: 27°C
<b>Storage</b>	Store indoors.



Co. Reg. No.: 1996/01848/07  
Tel No: +27 11 254 5500  
Website: [www.carboline.co.za](http://www.carboline.co.za)  
E-mail: [carbolinea@carboline.com](mailto:carbolinea@carboline.com)

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