

## SELECTION & SPECIFICATION DATA

<b>Generic Type</b>	Coal tar epoxy
<b>Description</b>	Renowned high build coal tar epoxy for protection of steel and concrete in single or two-coat applications in a broad variety of aggressive industrial applications.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Excellent chemical, corrosion and abrasion resistance</li> <li>• High build, 400 to 600 microns in a single coat (up to 875 microns with force curing)</li> <li>• Compatible with controlled cathodic protection</li> <li>• Suitable for use in exposures as referenced in the following specifications</li> <li>• Corp of Engineers C-200, C200a</li> <li>• AWWA C-210 for exterior</li> <li>• SSPC-Paint 16</li> <li>• Steel Tank Institute Corrosion Control System STI-P3</li> </ul>
<b>Color</b>	Black and Red
<b>Primer</b>	Self-priming, or use suitable primer as recommended by StonCor Africa.
<b>Dry Film Thickness</b>	400 microns, in one or two coats Total dry film thickness less than 200 microns or in excess of 875 microns is not recommended. Wet-on-wet spray techniques should be used for high thicknesses allowing time for solvents to flash between passes.
<b>Solid(s) Content</b>	74% ± 2%
<b>Theoretical Coverage Rates</b>	1.8m <sup>2</sup> /litre at 400 microns Allow for loss in mixing and application
<b>VOC Value(s)</b>	Thinner # 10 (8%): 269 g/l As Supplied: 222 g/l
<b>Dry Temp. Resistance</b>	Continuous: 177°C (351°F) Non-Continuous: 188°C (370°F)
<b>Limitations</b>	Do not use for potable water requirements.
<b>Topcoats</b>	Not recommended.
<b>Wet Temp. Resistance</b>	Immersion temperature should not exceed 49°C

## SUBSTRATES & SURFACE PREPARATION

<b>General</b>	Surfaces <b>must</b> 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>	<p><b>Immersion:</b> ISO 8501 Sa2½</p> <p><b>Non-immersion:</b> ISO 8501 Sa2</p> <p>ISO St2 or St3 as minimum requirement</p> <p><b>Surface Profile:</b> 50 to 75 microns</p>
<b>Concrete or CMU</b>	Concrete <b>must</b> be cured 28 days at 24°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.

# Bitumastic 300M

## PRODUCT DATA SHEET



### PERFORMANCE DATA (TYPICAL VALUES)

Test Method	System	Results
ASTM B117 Salt Fog	Blasted steel 2 Coats 300M	No blistering, rusting or delamination. No measurable undercutting at scribe after 2000 hours
ASTM D2794 Impact	Blasted steel 2 Coats 300M	Impact site diameter, 9.5, 9.5, 12.7 5.6m/kg Gardner Impactor at 12.7mm diam
ASTM D4541 Adhesion	Blasted steel 2 Coats 300M	9.9 MPa (Pneumatic)

Test reports and additional data available upon written request. \* Disclaimer: Bitumastic 300M is a proprietary formula that is not necessarily formulated to the exact compositional guidelines set forth in some of these standards. Major deviations that control and improve application characteristics may be present, but does **not** have a detrimental effect on the suitability for use outlined therein.

### MIXING & THINNING

<b>Mixing</b>	Power mix separately, then combine and power mix for a minimum of two minutes. DO NOT MIX PARTIAL KITS.
<b>Thinning</b>	Up to 15% with Thinner # 10 Up to 20% with Thinner # 10 for the first coat application to concrete. Use of thinners other than those supplied or recommended by StonCor Africa may adversely affect product performance and void product warranty, whether expressed or implied.
<b>Ratio</b>	4:1 Ratio (A to B)
<b>Pot Life</b>	2 Hours at 24°C 1 Hour at 32°C Pot life ends when coating loses body and begins to sag.

### APPLICATION EQUIPMENT GUIDELINES

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</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, 3/8" I.D. minimum material hose, with 50' maximum material hose .086" I.D. fluid tip and appropriate air cap.
<b>Airless Spray</b>	<b>Pump Ratio:</b> 30:1 * <b>GPM Output:</b> 3.0 (min) <b>Material Hose:</b> 1/2" I.D. (min) <b>Tip Size:</b> .025-.035" <b>Output PSI:</b> 2100 to 2500 <b>Filter Size:</b> 30 Mesh * Teflon packings are recommended and available from the pump manufacturer.
<b>Brush &amp; Roller (General)</b>	Recommended for touch-up, striping of weld seams and hard-to-coat areas only. Avoid excessive re-brushing or re-rolling.
<b>Brush</b>	Use a medium bristle brush.

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**Roller** | Use a short-nap synthetic roller cover with phenolic core.

## APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	10°C (50°F)	10°C (50°F)	10°C (50°F)	0%
Maximum	32°C (90°F)	52°C (126°F)	43°C (109°F)	90%

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.	Dry to Touch	Final Cure Immersion	Maximum Recoat Time	Minimum Recoat Time
10°C (50°F)	8 Hours	14 Days	24 Hours	10 Hours
24°C (75°F)	4 Hours	7 Days	24 Hours	6 Hours
32°C (90°F)	2 Hours	5 Days	24 Hours	3 Hours

### Curing Details

These times are based on a 400 micron dry film thickness. Higher film thickness, insufficient ventilation, high humidity or cooler temperatures will require longer cure times. 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 prior to the application of additional coats. Holiday Detection (if required): Wet sponge types may be used if the dry film thickness is below 500 microns. High voltage spark testing should be used when the dry film thickness exceeds 500 microns. Refer to the latest version of NACE SP1088 for specific procedures.

**FORCE CURING recommended for thicknesses above 600 microns:**

Hold substrate at 65°C for 8 hours and material will be ready to handle for immersion service.

## CLEANUP & SAFETY

<b>Cleanup</b>	For equipment flushing and cleaning, use Thinner # 76 or Thinner # 2. Use Thinner # 85 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 creams on face, hands and all exposed areas.
<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, workers should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

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## PRODUCT DATA SHEET



### PACKAGING, HANDLING & STORAGE

<b>Shelf Life</b>	Part A: Min. 24 months at 25°C Part B: Min. 24 months at 25°C Shelf life (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.
<b>Shipping Weight (Approximate)</b>	<b>5 Litre Lit</b> Part A: 5.6kg Part B: 1.3kg
<b>Storage Temperature &amp; Humidity</b>	4 to 43°C 0 to 100%
<b>Flash Point (Pensky Martens Closed Cup)</b>	Part A: 24°C Part B: 93°C
<b>Storage</b>	Store indoors

### WARRANTY

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance, injuries or damages resulting from use. Carbolines sole obligation, if any, is to replace or refund the purchase price of the Carboline product(s) proven to be defective, at Carbolines option. Carboline shall not be liable for any loss or damage. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. All of the trademarks referenced above are the property of Carboline International Corporation unless otherwise indicated.