

## Selection & Specification Data

|                                  |  |
|----------------------------------|--|
| <b>Generic Type</b>              | Epoxy Mastic   |
| <b>Description</b>               | Aluminium-pigmented, low-stress, high solids mastic with a proven field history. Carbomastic 15 was the pioneer mastic coating in a number of industrial markets and today still provides unmatched levels of barrier protection and corrosion resistance over existing finishes and rusted or ISO 8501 St2 or St3 cleaned steel.  |
| <b>Features</b>                  | <ul style="list-style-type: none"> <li>- Excellent performance over minimal surface preparation of steel substrates</li> <li>- Suitable as a topcoat for most tightly adhered existing coatings</li> <li>- Excellent choice for field touch-up of zinc rich primers and galvanized steel</li> <li>- Unique formulation with aluminium flakes provides exceptional barrier protection</li> <li>- Suitable for use under insulation on hot surfaces operating up to 150°C</li> <li>- VOC compliant to current AIM regulations</li> </ul> |
| <b>Colour</b>                    | Aluminium<br><br>Colour variations within a batch and from batch to batch may occur due to the metallic pigments and variations in application techniques and conditions. Neither product is colour matched, nor will they match each other.   |
| <b>Primer</b>                    | Self-priming. May be applied over most tightly adhering coatings as well as inorganic zinc primers.  |
| <b>Dry Film Thickness</b>        | 75 to 125 microns over existing coatings<br>175 to 250 microns in one or two coats in severe exposures<br><br><b>Do not exceed 250 microns in a single coat</b>  |
| <b>Solids Content</b>            | By volume 90% ± 2%   |
| <b>HAPs Values</b>               | As supplied: 0,084kg/solid litre   |
| <b>Theoretical Coverage Rate</b> | 12,0m <sup>2</sup> /litre at 75 microns<br>7,2m <sup>2</sup> /litre at 125 microns<br>3,6m <sup>2</sup> /litre at 250 microns<br><br>Allow for loss in mixing and application  |
| <b>Severe Exposures</b>          | Temperature resistance under insulation: up to 150°C<br><br>Discolouration is observed above 82°C but does not affect performance.   |
| <b>VOC Values</b>                | Thinner # 10: 25% - 242g/litre<br>As Supplied: 88g/litre<br><br>These are nominal values.  |
| <b>Topcoats</b>                  | May be coated with Acrylics, Epoxies, Alkyds or Polyurethanes depending on exposure and need.  |

## 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>                       | <p><b>Immersion:</b> ISO 8501 Sa2½ with a 50 to 75 micron surface profile</p> <p><b>Non-Immersion:</b> ISO 8501 Sa2 with a 50 to 75 micron surface profile for maximum protection.</p> <p>ISO 8501 St2, St2 or Sa1 are also acceptable methods.</p> |
| <b>Galvanised Steel</b>            | For optimum performance, sweep blast cleaning is recommended. Consult your StonCor Africa Sales Representative for specific recommendation.   |
| <b>Previously Painted Surfaces</b> | Lightly sand or abrade to roughen and degloss the surface. Existing paint must attain a minimum 3A rating in accordance with ASTM D3359 "X-Scribe" adhesion test.   |

## Performance Data

| Test Method                  | System  | Results  |
|------------------------------|---|--|
| Taber Abrasion (ASTM 4060)   | 1 ct. CM15  | 130mg loss; 1000 cycles using CS 17 wheel and 1000gm load                                    |
| Salt Spray (ASTM B117)       | Rusted steel<br>1 ct. CM15                                  | No blistering, rusting or softening. No rust creep from scribe                               |
| Water Fog (ASTM D1735)       | Rusted steel<br>1 ct. CM15                                  | No blistering or softening. No creep from scribe   |
| Flexibility (ASTM D522)      | Blasted steel<br>1 ct. CM15                                 | A) Conical – crack 9,65mm, actual elongation 48.57%<br>B) Cylindrical – no cracking observed |
| Impact Resistance (ASTM G14) | A) Blasted steel; 1 ct. CM15<br>B) Rusted steel; 1 ct. CM15 | Area Damaged<br>A) 6,35mm<br>B) 6,35mm – 14.27mm   |

Test reports and additional data available upon written request.

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# Carbomastic® 15

## 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.

**Conventional Spray** Pressure pot equipped with dual regulators, 10mm I.D. minimum material hose, 1.8mm I.D. fluid tip and appropriate air cap.

**Airless Spray** Pump Ratio: 45:1  
GPM Output: 3.0 (min)  
Material Hose: 10mm I.D. (min)  
Tip Size: .019-.025"  
Output PSI: 1900-2100  
Filter Size: 60 Mesh  
\* Teflon packings are recommended and available from the pump manufacturer.

**Plural Component** May be applied by plural component spray equipment. Contact StonCor Africa Technical Service for specific recommendations.

**Brush & Roller (General)** Multiple coats may be required to obtain desired appearance, recommended dry film thickness and adequate hiding. Avoid excessive re-brushing or rerolling. Use clean natural bristle brush or medium nap phenolic core roller. Work coating into all irregularities.

**Spray Application (General)** The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.

## Mixing & Thinning

**Mixing** Power mix separately, then combine and power mix. DO NOT MIX PARTIAL KITS.

**Thinning** May be thinned up to 25% with Thinner # 10 for normal conditions. Use of thinners other than those supplied by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.

**Ratio** 1:1 Ratio (A to B)

**Pot Life** 4 Hours at 25°C – Thinned 25%  
2 Hours at 32°C – Thinned 25%  
2 Hours at 25°C – Unthinned  
1 Hour at 32°C – Unthinned

## Application Conditions

| Condition | Material | Surface | Ambient | Humidity |
|-----------|----------|---------|---------|----------|
| Minimum   | 10°C     | 10°C    | 10°C    | 0%       |
| Maximum   | 32°C     | 54°C    | 38°C    | 95%      |

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 | Final Cure Immersion | Dry to Recoat or Topcoat |
|--------------------------------------|----------------------|--------------------------|
| 10°C                                 | 15 Days              | 5 Days                   |
| 16°C                                 | 10 Days              | 3 Days                   |
| 24°C                                 | 5 Days               | 24 Hours                 |
| 32°C                                 | 3 Days               | 18 Hours                 |

**For Carbomastic 15 Dry to Touch is 5 hours at 25°C. Maximum recoat / topcoat times are 30 days for epoxies and 90 days for polyurethanes at 25°C.**

These times are based on a 125 to 175 micron dry film thickness. Higher film thickness, 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 prior to the application of additional coats. **Note:** This product contains conductive pigments and cannot be holiday tested.

## Cleanup & Safety

**Cleanup** Use Thinner # 2. 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 material safety data sheet 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** 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. In addition to ensuring proper ventilation, appropriate respirators must be used by all application personnel.

## Packaging, Handling & Storage

**Shelf Life** Part A & B: Minimum 36 months at 25°C

\* Shelf life when kept at recommended storage conditions and in original unopened containers.

**Shipping Weight (Approximate)** 10 Litre Kit  
Part A = 6,63kg  
Part B = 8,29kg

**Storage Temperature & Humidity** 7-43°C  
0-90% Relative Humidity

**Flash Point (Setaflash)** Part A: > 93°C  
Part B: 24°C

**Storage** Store indoors. This product is solvent-based and not affected by excursions below these published storage temperatures, down to -12°C, for a duration of no more than 14 days. Always inspect the product prior to use to make sure it is smooth and homogeneous when properly mixed.



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