

## SELECTION & SPECIFICATION DATA

<b>Generic Type</b>	Polyamide Epoxy with corrosion inhibitor, (zinc phosphate)
<b>Description</b>	A high performance, surface tolerant, high build, corrosion resistant epoxy mastic. It has outstanding adhesion to metal substrates along with most aged coatings and offers maximum protection against severe weather conditions, corrosion, moisture penetration and general industrial environments. It wets and penetrates firm rust and tight crevices and resists further rust deterioration. Use it on tank exteriors, structural steel, piping, process equipment, bridges & water towers. Carbomastic 94 may also be used for immersion in fresh or salt water (marine) exposures on barges, vessels and other marine applications. An optional micaceous iron oxide, (MIO), additive can be purchased separately and may be used per its Product Data Sheet to further enhance the coating's performance.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Surface tolerant epoxy mastic</li> <li>• Excellent corrosion protection</li> <li>• Low VOC</li> <li>• Custom colors available via RTS</li> <li>• Excellent wetting properties and adhesion</li> <li>• High solids, low stress over existing coatings</li> <li>• High film build, up to 7 mils DFT per coat</li> <li>• Class A Flame Spread and Smoke Development</li> <li>• Excellent durability</li> <li>• Good flexibility and impact resistance</li> <li>• Outstanding abrasion resistance</li> <li>• Good chemical resistance</li> <li>• Long pot life</li> <li>• Long maximum re-coat, up to 1 year</li> <li>• Approved topcoat over many Carboline Fireproofing Materials</li> </ul>
<b>Color</b>	1864 (White), ANSI Grey (2716) A wide range of colors is available upon request using Carboline's Rapid Tint System (RTS). Contact your Carboline representative for RTS color availability.
<b>Finish</b>	Semi-Gloss
<b>Primer</b>	Self priming. May be used over zinc-rich primers or other epoxies.
<b>Dry Film Thickness</b>	5 - 7 mils (127 - 178 microns) per coat 5 mils for most applications; 7 mils for more aggressive exposures.
<b>Solids Content</b>	By Volume 86% +/- 2%
<b>Theoretical Coverage Rate</b>	1379 ft <sup>2</sup> /gal at 1.0 mils (33.9 m <sup>2</sup> /l at 25 microns) 276 ft <sup>2</sup> /gal at 5.0 mils (6.8 m <sup>2</sup> /l at 125 microns) 197 ft <sup>2</sup> /gal at 7.0 mils (4.8 m <sup>2</sup> /l at 175 microns) Allow for loss in mixing and application.
<b>VOC Values</b>	<b>As Supplied</b> : 1.0 lbs/gal (120 g/l) Thinner 248 added at 25 oz. per mixed gallon: 2.0 lbs/gal (240 g/l)
<b>Dry Temp. Resistance</b>	Continuous: 200°F (93°C) Non-Continuous: 250°F (121°C)

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**Topcoats** | May be coated with Acrylics, Epoxies, or Polyurethanes depending on exposure and need.

### SUBSTRATES & SURFACE PREPARATION

**General** | 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 in accordance with SSPC-SP 1 and follow the guidelines below.

**Steel** | New Steel: it is recommended that the steel be abraded, preferably to a minimum of Commercial Blast Clean with 1.5 to 3 mils (37 to 75 microns) anchor profile in accordance with NACE No. 3/SSPC-SP 6. For alternative methods contact Carboline Technical Service.  
Weathered (corroded) Steel: for optimum performance abrasive blast clean to a minimum of Commercial Blast with 1.5 to 3 mils (37 to 75 microns) anchor profile in accordance with NACE No. 3/SSPC-SP 6. Alternative methods may include SSPC-SP 2, SSPC-SP 3, NACE No. 4/SSPC-SP 7, or NACE/SSPC WJ-1 to WJ-4.

When using under fireproofing products, defer to the primer surface preparation requirements in the product data sheet of the fireproofing product.

**Galvanized Steel** | For optimum performance clean and abrade in accordance with SSPC-SP 16. Some service conditions may only require the galvanized steel to be clean and dry. Contact Carboline Technical Service for recommendations.

When using under fireproofing products, defer to the primer surface preparation requirements in the product data sheet of the fireproofing product.

**Previously Painted Surfaces** | Clean and lightly sand or abrade to roughen and degloss the surface. Existing coating must attain a minimum 3A rating in accordance with ASTM D3359 adhesion test.

### MIXING & THINNING

**Mixing** | Thoroughly mix each component using mechanical agitation. Pour the activator, part B, into part A (mixing ratio by volume: 1 part activator, part B, to 1 part base, part A) and mix well using mechanical agitation.

**Induction Time** | Allow 15 minutes induction time at 77°F (25°C).

**Thinning** | Mixed Carbomastic 94 may be thinned up to a maximum of 20% (25 fluid ounces per gallon) with Thinner 248 or Thinner 230. For application to hot substrates up to 200 °F (93 °C) it is recommended to thin approximately 20% (25 oz/gal) with Thinner 230. Use of solvents other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.

**Pot Life** | Maximum 4 hours at 77 °F (25 °C). In order to maintain application properties, mix (activate) only what can be applied in 4 hours.

### 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.

**Spray Application (General)** | Use a 50% overlap with each pass when spraying to eliminate holidays and pinholes.

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<b>Conventional Spray</b>	Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, 0.086" I.D. fluid tip and appropriate air cap.
<b>Airless Spray</b>	Material Hose: 3/8" I.D. (min.) Tip Size: 0.019-0.023" Output PSI: 3000 minimum High Pressure Filter: 30 Mesh
<b>Brush</b>	Natural bristle or nylon/polyester
<b>Roller</b>	1/4-3/8" woven, solvent resistant core for smooth surfaces, 3/4- 1 1/4" nap for rough surfaces.

## APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	90°F (32°C)	200°F (93°C)	110°F (43°C)	100%

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 and/or thinning may be required for application when conditions are above and below normal application conditions.

## CURING SCHEDULE

Surface Temp.	Dry to Touch	Dry to Recoat	Dry to Topcoat	Dry to Handle
50°F (10°C)	10 Hours	20 Hours	40 Hours	20 Hours
60°F (16°C)	6 Hours	12 Hours	24 Hours	12 Hours
75°F (24°C)	3 Hours	6 Hours	12 Hours	6 Hours
90°F (32°C)	1.5 Hours	3 Hours	6 Hours	3 Hours

Expect longer dry times in periods of higher humidity or lower temperatures or when applying thicker films. These dry times are for exterior exposures at recommended film thickness with good ventilation. Recoat intervals may vary from those listed above when using under intumescent fireproofing products. Consult Carboline Technical Service for recommended cure times before applying Carboline intumescent products.

The temperature of the substrate during coating application must be at least 5 °F above the dew point of the air. \* Note: Dry to recoat is 6 hours or within 1 year.

## CLEANUP & SAFETY

<b>Cleanup</b>	Clean up all tools and equipment promptly with Thinner 2.
<b>Safety</b>	Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal workmanlike safety precautions. Use adequate ventilation. Keep container closed when not in use.

# Carbomastic<sup>®</sup> 94

## PRODUCT DATA SHEET



### PACKAGING, HANDLING & STORAGE

<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.
<b>Storage Temperature &amp; Humidity</b>	40-110 °F (4-43 °C) (Can be stored down to 20 °F (-7 °C) for no longer than 30 days) 0-100% Relative Humidity
<b>Storage</b>	Store Indoors.
<b>Shipping Weight (Approximate)</b>	2-Gal Kit - 29 lbs 10-Gal Kit - 139 lbs
<b>Flash Point (Setaflash)</b>	Part A - 89 °F (32 °C) Part B - 105 °F (41 °C)

### 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.