

## SELECTION & SPECIFICATION DATA

<b>Generic Type</b>	Water-based epoxy primer
<b>Description</b>	A water based epoxy primer that is easy to apply and has very good chemical resistance. Carboguard 553 primer has significant improvements in film hardness and toughness over straight acrylic or acrylic-epoxy systems. It provides better chemical resistance and physical properties. It can be used in more moderate to aggressive exposures.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Low odor</li> <li>• Very low VOC</li> <li>• Fast drying</li> <li>• Excellent corrosion protection</li> <li>• Very good chemical resistance</li> <li>• Contains corrosion inhibitive pigments</li> </ul>
<b>Color</b>	Grey (0700)
<b>Dry Film Thickness</b>	3 - 4 mils (76 - 102 microns) per coat
<b>Solids Content</b>	By Volume 44% +/- 2%
<b>Theoretical Coverage Rate</b>	706 ft <sup>2</sup> /gal at 1.0 mils (17.3 m <sup>2</sup> /l at 25 microns) 235 ft <sup>2</sup> /gal at 3.0 mils (5.8 m <sup>2</sup> /l at 75 microns) 176 ft <sup>2</sup> /gal at 4.0 mils (4.3 m <sup>2</sup> /l at 100 microns) Allow for loss in mixing and application.
<b>VOC Values</b>	<b>As Supplied</b> : 0.67 lbs/gal (80 g/l) EPA Method 24: 1.25 lbs/gal (150 g/l) These are nominal values and may vary slightly with color.
<b>Dry Temp. Resistance</b>	Continuous: 250°F (121°C) Non-Continuous: 300°F (149°C)
<b>Limitations</b>	Epoxies may lose gloss, discolor and chalk when exposed to sunlight.
<b>Topcoats</b>	May be topcoated with epoxies, urethanes or others recommended by Carboline

## 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>	SSPC-SP6 with a 1.0-2.0 mil (25-50 micron) surface profile. When using under fireproofing products, defer to the primer surface preparation requirements in the product data sheet of the fireproofing product.
<b>Concrete or CMU</b>	Concrete shall be designed, placed, cured, and prepared per NACE No. 6/SSPC-SP 13, latest edition. Abrade to remove all laitance, loose concrete, etc. and to create surface profile in accordance with the appropriate ICRI CSP standard for the coating system.

### MIXING & THINNING

<b>Mixing</b>	Power mix base, then combine as follows: 1.25 Gal. Kit Part A: 1 Gallon Part B: 1 Quart 5 Gal. Kit 4 Gallons 1 Gallon
<b>Thinning</b>	Normally not required. May be thinned up to 5% with clean potable water.
<b>Pot Life</b>	4 hours at 75°F (24 °C) and less at higher temperatures.  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>	The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss, Speedflo, and Graco. Prior to use, flush all equipment with Thinner 21 followed by clean potable water.
<b>Conventional Spray</b>	Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, with a maximum length of 50', 0.070" I.D. fluid tip and appropriate air cap.
<b>Airless Spray</b>	<ul style="list-style-type: none"> <li>• Pump Ratio: 30:1 (min.)*</li> <li>• GPM Output: 3.0 (min.)</li> <li>• Material Hose: 3/8" I.D. (min.)</li> <li>• Tip Size: 0.015-0.017"</li> <li>• Output PSI: 1600-2400</li> <li>• Filter Size: 60 mesh</li> </ul> <p>*PTFE packings are recommended and available from the pump manufacturer.</p>
<b>Brush &amp; Roller (General)</b>	Multiple coats may be required to achieve desired dry film thickness and hiding characteristics.
<b>Brush</b>	Use a synthetic bristle brush.
<b>Roller</b>	For smooth surfaces, use a short woven nap synthetic roller. For rough surfaces, cinder block or very porous concrete, use a 3/8" woven nap synthetic roller.

### APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	40°F (4°C)	40°F (4°C)	20%
Maximum	95°F (35°C)	110°F (43°C)	110°F (43°C)	90%

## CURING SCHEDULE

Surface Temp.	Dry to Handle	Dry to Recoat	Dry to Recoat with Solvent Based Urethanes
50°F (10°C)	10 Hours	12 Hours	36 Hours
75°F (24°C)	3 Hours	4 Hours	12 Hours
90°F (32°C)	2 Hours	3 Hours	6 Hours

These times are based on a 3.0 mil (75 micron) dry film thickness and 40-60% relative humidity. Higher film thicknesses, insufficient ventilation, high humidity or cooler temperatures will require longer cure times. 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.

## CLEANUP & SAFETY

<b>Cleanup</b>	Use potable water followed with suitable solvent to dry equipment. 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 SDS for this product. Employ normal workmanlike safety precautions. Use adequate ventilation. Keep container closed when not in use.

## PACKAGING, HANDLING & STORAGE

<b>Shelf Life</b>	12 months
<b>Storage Temperature &amp; Humidity</b>	40-100 °F (4-38 °C) 0-90% Relative Humidity
<b>Shipping Weight (Approximate)</b>	1.25 Gallon Kit - 13.5 lbs. (6.1 kg) 5 Gallon Kit - 80 lbs. (30 kg)
<b>Flash Point (Setaflash)</b>	Part A: >200 °F (93 °C) Part B: >200 °F (93 °F)

## WARRANTY

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