

SELECTION & SPECIFICATION DATA

Generic Type	Polyamido-Amine Epoxy
Description	Penetrating primer/sealer for use on concrete substrates. It performs extremely well in sealing cementitious surfaces and is designed to receive a variety of different generic types of finish coats. Some recommended uses of Carboseal 780 include the use as a curing compound or form release agent. When applied to "green" concrete it will retard the escape of moisture during the cure period.
Features	<ul style="list-style-type: none"> • Exceptional wetting characteristics • Low stress, highly flexible film • Very high solids • Low odor • User-friendly brush & roller application • Low VOC, <50 g/l
Color	Clear Amber (0910)
Finish	Gloss
Primer	Self-priming. May be applied over most generic types of coatings.
Dry Film Thickness	<p>1 - 2 mils (25 - 51 microns) per coat</p> <p>Product can be applied up to 4.0 mils (100 microns) for sealing rough surfaces or shot-blasted concrete. When used as a curing and/or form release agent, it may be applied up to 10.0 mils (250 microns) wet.</p>
Solids Content	By Volume 98% +/- 2%
Theoretical Coverage Rate	<p>1572 ft²/gal at 1.0 mils (38.6 m²/l at 25 microns)</p> <p>786 ft²/gal at 2.0 mils (19.3 m²/l at 50 microns)</p> <p>Allow for loss in mixing and application.</p>
VOC Values	<p>As Supplied : 0.2 lbs/gal (24g/l) per EPA Method 24</p> <p>Thinner 76 : 25 oz/gal = 1.3 lbs/gal (156 g/l)</p> <p>These are nominal values</p>
Dry Temp. Resistance	<p>Continuous: 175°F (79°C)</p> <p>Non-Continuous: 200°F (93°C)</p>
Limitations	<ul style="list-style-type: none"> • Epoxies lose gloss, discolor and eventually chalk in sunlight exposure. • Do not use for immersion service.
Topcoats	May be coated with acrylics, epoxies, or polyurethanes depending on exposure and need.

SUBSTRATES & SURFACE PREPARATION

As a Curing Membrane	While Carboseal 780 may be applied to green concrete, generally additional coats or other coatings should not be applied until the concrete has cured 28 days at 75 °F (24 °C) and 50% relative humidity or equivalent. Application of a test patch is recommended prior to topcoating to confirm proper adhesion.
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SUBSTRATES & SURFACE PREPARATION

Concrete | 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 ICRI CSP 2-5.

 | Contact Carboline for advice if there are impurities, such as oils, excess moisture, etc., in the concrete. Check the relative humidity of floors at ground level. Follow our instructions for connections to grid drains, cesspools, pipes and pipe inlets.

Concrete or CMU | 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.

MIXING & THINNING

Mixing | Power mix Part A and B separately, then combine and power mix.
DO NOT MIX PARTIAL KITS.

Thinning | Normally not required but may be thinned up to 25 oz/gal (20%) with Thinner 76. Use of thinners other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.

Ratio | 1:1 Ratio (A to B)

Working Time | 45 minutes at 75 °F (24 °C)
Pot life will be less at higher temperatures.

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.

Brush & Roller (General) | Avoid excessive re-brushing or re-rolling. Apply only enough material to wet the surface uniformly. Any puddles formed must be brushed out.

Brush | Use a medium bristle brush.

Roller | Use a medium or long-nap synthetic roller cover with phenolic core.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	60°F (16°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	90°F (32°C)	130°F (54°C)	100°F (38°C)	90%

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. Special application techniques may be required above or below normal application conditions.

CURING SCHEDULE

Surface Temp.	Dry to Handle	Final Cure General	Maximum Recoat Time w/ Water Borne	Maximum Recoat Time w/ Solvent Borne
50°F (10°C)	24 Hours	9 Days	14 Days	30 Days
75°F (24°C)	12 Hours	6 Days	14 Days	30 Days
90°F (32°C)	6 Hours	3 Days	7 Days	15 Days

These times are based on 50% relative humidity and 1.0-2.0 mil (25-50 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 cure 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. During high humidity conditions, it is recommended that the application be done while temperatures are increasing. If the maximum recoat time is exceeded, the surface must be abraded by sweep blasting or sanding before the application of additional coats.

Surface Temp.	Dry to Handle	Final Cure
75°F (24°C)	5 Hours	6 Days

This is the curing schedule for **Curing/Form Release Agent**.

These times are based on 50% relative humidity and 5-10 mils (125-250 microns) dry film thickness.

CLEANUP & SAFETY

Cleanup	Use Thinner 2 or Acetone. 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 SDS for this product. Employ normal workmanlike safety precautions. Use adequate ventilation. Keep container closed when not in use.
Ventilation	When used in enclosed areas and product is thinned, 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.
Caution	This product exotherms at the end of its pot life. Any unused quantities will become extremely hot. The material begins to thicken at the end of its pot life, which is an indication of exotherm. Immediately spread out on an appropriate surface or add sand or other suitable heat sink to the unused material to reduce the severity of exotherm. Take appropriate precautions against breathing fumes. This product when thinned 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.

PACKAGING, HANDLING & STORAGE

Packaging	0.5 Gallon Kit
	Carboseal 780 Part A - 0.25 gal (0.9 kg)
	Carboseal 780 Part B - 0.25 gal (0.9 kg)
	2 Gallon Kit
	Carboseal 780 Part A - 1 gal (3.8 kg)
	Carboseal 780 Part B - 1 gal (3.8 kg)

PACKAGING, HANDLING & STORAGE

Shelf Life	Part A & B: Min. 36 months at 75 °F (24 °C) Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.
Storage Temperature & Humidity	40-110 °F (4-43 °C) 0-90% Relative Humidity
Storage	Store indoors
Shipping Weight (Approximate)	0.5 Gallon Kit - 5 lbs (2.5 kg) 2 Gallon Kit - 21 lbs (9.5 kg)
Flash Point (Setaflash)	Part A: >205 °F (96 °C) Part B: >205 °F (96 °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.