

SELECTION & SPECIFICATION DATA

Generic Type	High performance, 100% solids epoxy floor coating
Description	Carboseal 705 is a versatile, clear epoxy floor coating that provides improved clarity and performance over conventional epoxy coatings. Self priming epoxy that can be used as a receiving and seal coats for decorative broadcast floors. Color packs can be added if a pigmented epoxy is desired.
Features	<ul style="list-style-type: none"> • Decorative and hygienic floor finish • Easy to clean and maintain • Excellent wear and chemical resistance • High scratch and abrasion resistance • Rapid installation • Fire Resistance Class G Certificate No 1721/75 SITAC • Good chemical resistance • Ultra low VOC/odor
Color	<p>This product can be tinted with Universal Color Packs.</p> <p>Stocked Colors: Light Gray (Q700), Medium Gray (Q701)</p> <p>Made to Order Colors: Blue (Q100), Khaki (Q200), Beige (201), Green (Q300), Brick Red (Q500), Traffic Red (Q502), Traffic Yellow (Q602), Dark Gray (Q702), Charcoal (Q707), White (Q800), Black (Q900)</p>
Primer	<p>Self priming.</p> <p>In case of highly porous substrate prime with Carboseal 720 or Carboguard 1340 WB.</p>
Dry Film Thickness	<p>10 - 15 mils (254 - 381 microns) per coat</p> <p>Higher film build possible with broadcast or trowel applied systems.</p> <p>Coverage rates will vary with surface profile and temperature.</p> <p>Non-slip finishes: Various grades of quartz, aluminum oxide, glass spheres or silicon carbide can be incorporated to provide a textured surface.</p>
Typical Uses	<p>Carboseal 705 is typically used in conjunction with a decorative broadcast (vinyl flakes or quartz) or with a color pack to provide high performance floor surface. Carboseal 705 can also be used as a clear topcoat or sealer without the addition of aggregates or color packs. Typical applications include:</p> <p>Warehouses, Aisles, Bathrooms, Kitchens, Cafeterias, Laboratories, Classrooms, Showers, and other areas that require an epoxy floor finish</p>
Solids Content	By Volume 100%
Theoretical Coverage Rate	<p>1604 ft²/gal at 1.0 mils (39.4 m²/l at 25 microns)</p> <p>160 ft²/gal at 10.0 mils (3.9 m²/l at 250 microns)</p> <p>107 ft²/gal at 15.0 mils (2.6 m²/l at 375 microns)</p> <p>Allow for loss in mixing and application.</p>
VOC Values	As supplied 0.08 lbs/gal (10 g/L)
Topcoats	Optional: Carboseal 715, Carboseal 725, Carboseal 745, Carboseal 835, Carboseal 865, Carboseal 985 or as recommended by Carboline

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.

PERFORMANCE DATA

All test data was generated under laboratory conditions. Field testing results may vary.

Test Method	Results
Abrasion Resistance (ASTM D4060)	0.08 grams
Bond Strength (ASTM D4541)	425 psi
Compressive Strength (ASTM C579)	10,000 psi
Flexural Strength (ASTM C580)	3,900 psi
Impact Resistance (ISO6272)	31.8 in-lbs (70") / 13.4 in-lbs (59")
Pendulum Slip Test (BS 7976-2) (typical values for 4-S rubber slider)	59 (dry); 35 (wet) / 40 (size 5 Quartz)
Shore D Hardness (ASTM D2240)	Shore D 85-90
Temperature Resistance	Tolerant of sustained temp up to 120 °F (49 °C)
Tensile Strength (ASTM C307)	>2,100 psi
Vapor Permeability (ASTM E96:90)	1.36g /m2/mm/24 hrs
Water Permeability (Karsten test. [impermeable])	Nil

MIXING & THINNING

Mixing

Premix HPR High Performance Resin Base A, then add Carboseal 705 Hardener B with mixing and mix for 2 minutes.

Universal Color Pack can be added to Carboseal 705. Add the Universal Color Pack to HPR High Performance Resin Base A and mix prior to adding Carboseal 705 Hardener B.

Note: Carboline products are often multiple-component systems. Poor mixing, or incorrect mixing procedures, can result in irregular and incomplete hardening, which in turn can result in an inferior final result.

Ratio | 2:1 (A to B)

Gel Time | 48 minutes

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.

General

- Notched rubber squeegee
- Shed resistant short nap roller

APPLICATION PROCEDURES

General	Immediately after mixing, pour Carboseal 705 evenly over the floor. Then spread to the desired thickness with a notched rubber squeegee and back roll with a shed resistant short nap roller.
Broadcast	For decorative or slip resistant floors broadcast desired aggregate into wet material until rejection. After coating has reached walk-on cure time remove excess aggregate and apply desired topcoat.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	60°F (16°C)	50°F (10°C)	60°F (16°C)	0%
Maximum	80°F (27°C)	80°F (27°C)	80°F (27°C)	90%

The temperature of the substrate should not exceed the dew point by 5 °F (3 °C) during application and hardening.
Temperatures should not fall below 50 °F (10 °C) in the 24 hours after application.

CURING SCHEDULE

Surface Temp.	Minimum Recoat Time	Light Traffic	Maximum Recoat Time	Heavy Traffic	Final Cure
75°F (24°C)	8 Hours	11 Hours	24 Hours	36 Hours	6 Days

Final cure in 5-7 days

CLEANUP & SAFETY

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.
---------------	---

PACKAGING, HANDLING & STORAGE

Packaging	<p>3 Gallon Kit: HPR High Performance Resin Base A - 2 gal (7.8 liters) Carboseal 705 Hardener B - 1 gal (3.8 liters)</p> <p>12 Gallon Kit: HPR High Performance Resin Base A - 2 X 4 gal (30.3 liters) Carboseal 705 Hardener B - 4 gal (15.1 liters)</p> <p>A Universal Color Pack can be used if desired</p>
Shelf Life	<p>Part A: 12 months Part B: 12 months Color Pack: 12 months</p> <p>Actual stated shelf life when kept at recommended storage conditions and in original unopened containers.</p>
Storage Temperature & Humidity	45-100 °F (7-38 °C)
Shipping Weight (Approximate)	3 Gallon Kit - Approx. 36 lbs (16 kg) 12 Gallon Kit - Approx. 122 lbs (55 kg)

Carboseal[®] 705

PRODUCT DATA SHEET



PACKAGING, HANDLING & STORAGE

Flash Point (Setaflash)	Part A: >200 °F (93 °C)
	Part B: >200 °F (93 °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.