Carbothane® Clear Coat (Satin)

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Aliphatic Acrylic Polyurethane
Description	A clear coat finish that provides added UV protection over pigmented Carboline polyurethanes. Exceptionally hard film and excellent depth-of-image provide extended service life to the Carbothane topcoats, especially when deeptone and metallic colors are used.
Features	• Hard finish with excellent impact and abrasion resistance • Excellent resistance to UV degradation • High gloss version provides very good depth of image • Attractive gloss and satin finishes • Suitable for conventional spray or roller application • VOC compliant to current AIM regulations
Color	Clear (0910)
Finish	Satin
Dry Film Thickness	1 - 2 mils (25 - 51 microns) per coat
Solids Content	By Volume 57% +/- 2%
Theoretical Coverage Rate	914 ft²/gal at 1.0 mils (22.4 m²/l at 25 microns) 457 ft²/gal at 2.0 mils (11.2 m²/l at 50 microns) Allow for loss in mixing and application.
VOC Value(s)	Per EPA Method 24: 2.3 lbs/gal (340 g/l) 13 oz/gal of Thinner 214: 3.4 lbs/gal (407 g/l) 13 oz/gal of Thinner 215: 3.4 lbs/gal (407 g/l) 13 oz/gal of Thinner 236 E: 2.3 lbs/gal (360 g/l) This product contains US EPA VOC-exempt solvent(s).
Dry Temp. Resistance	Continuous: 200°F (93°C) Non-Continuous: 250°F (121°C) Discoloration and loss of gloss is observed above 200 °F (93 °C).

SUBSTRATES & SURFACE PREPARATION

General	Apply over Carbothane topcoats that are clean and dry, and within the recoat time allotment. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating.
Previously Painted Surfaces	Consult Carboline Technical Services for information.

MIXING & THINNING

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

MIXING & THINNING

Thinning	**Spray:** Normally not required. **Brush or Roller:** Up to 13 oz/gal (10%) w/ #214, 215, or 236E (exempt solvent) for VOC restricted areas. 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	Satin: 4:1 Ratio (A to B)
Pot Life	3 Hours at 75°F (24°C) and less at higher temperatures. Pot life ends when coating becomes too viscous to use. MOISTURE CONTAMINATION WILL SHORTEN POT LIFE AND CAUSE GELLATION.

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)	This is a high solids coating and may require adjustments in spray techniques. Wet film thickness is easily and quickly achieved. The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.
Conventional Spray	Pressure pot equipped with dual regulators, 3/8” I.D. minimum material hose, .043” I.D. fluid tip and appropriate air cap.
Airless Spray	Not recommended.
Brush	Recommended for touch-up only. Use a medium, natural bristle brush and avoid excessive re-brushing.
Roller	Use a ½"-nap mohair roller cover with phenolic core and avoid excessive re-rolling.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	35°F (2°C)	35°F (2°C)	10%
Maximum	100°F (38°C)	120°F (49°C)	95°F (35°C)	80%

Industry standards are for substrate temperatures to be above the dew point.
Caution: This Product is moisture sensitive in the liquid stage and until fully cured. Protect from high humidity, dew and direct moisture contact until fully cured. Application and/or curing in humidities above maximum, or exposure to moisture from rain or dew may result in a loss of gloss and/or micro-bubbling of the product.

CURING SCHEDULE

Surface Temp.	Dry to Handle	Dry to Recoat	Final Cure General
35°F (2°C)	36 Hours	36 Hours	14 Days
50°F (10°C)	16 Hours	16 Hours	10 Days
75°F (24°C)	8 Hours	8 Hours	7 Days
90°F (32°C)	4 Hours	4 Hours	5 Days

These times are based on a 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.

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. Hypersensitive persons should wear protective clothing, gloves and use protective cream on face, hands and all exposed areas.
Ventilation	When used 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. 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 supplied air respirator.
Caution	This product 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, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Shelf Life	Part A: Min. 36 months at 75 °F (24 °C) Part B (Urethane Converter 811): Min. 24 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) 0-80% Relative Humidity
Storage	Store Indoors.
Shipping Weight (Approximate)	**Satin** 1.0 Gallon Kit - 11 lbs 5 Gallon Kit - 55 lbs
Flash Point (Setaflash)	Part A: 43 °F (6 °C) Part B (Urethane Converter 811): 127 °F (53 °C)

WARRANTY

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