Carboxane 2000 TC

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Modified Siloxane Hybrid
Description	Carboxane 2000 TC is a premium, ultra-durable coating that provides exceptional gloss and color retention for exterior exposures. This coating utilizes a UV-resistant siloxane binder resulting in a finish with outstanding barrier properties and weathering performance that far exceeds polyurethanes. When used over a recommended priming system is suitable for a variety of applications including tanks, equipment, structural steel and piping, for commercial, industrial or marine/offshore environments.
Features	• Exceptional weatherability • Long life performance • Outstanding gloss and color retention • Excellent abrasion resistance • Isocyanate-free
Color	Refer to Carboline Color Guide
Finish	Gloss
Primer	Compatible with inorganic and organic zinc rich primers, epoxies and others as recommended by Carboline Technical Service
Dry Film Thickness	76 - 152 microns (3 - 6 mils) per coat Normally specified at 3 mils (75 microns) when used over a primer and intermediate coat.
Solids Content	By Volume 70% +/- 2%
Theoretical Coverage Rate	27.6 m²/l at 25 microns (1123 ft²/gal at 1.0 mils) 9.2 m²/l at 75 microns (374 ft²/gal at 3.0 mils) 4.6 m²/l at 150 microns (187 ft²/gal at 6.0 mils) Allow for loss in mixing and application.
Severe Exposures	For severe marine environments (offshore structures) a three coat system is recommended. For other severe exposures, a two coat system may be used provided the minimum film thickness of 5 mils (125 microns) is achieved.
VOC Values	**As Supplied** : 2.05 lbs/gal (246 g/l) mixed Thinner 10 : 13 oz/gal: 2.50 lbs/gal (300 g/l) These are nominal values and may vary with color
Dry Temp. Resistance	Continuous: 93°C (200°F) Non-Continuous: 121°C (250°F)

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. Refer to specific primer's Product Data Sheet for detailed requirements of the specified primer
Steel	Follow recommendations for specified primer.

MIXING & THINNING

Mixing	Power mix Parts A and B separately; then combine and power mix.
Thinning	May be thinned up to 15% (18 oz/gal) with Thinner 10. 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	2:1 (Part A to B) by volume.
Pot Life	4 hours at 75°F (23°C) and less at higher temperatures. Material is moisture sensitive. If left uncovered for extended periods or under very high humidity conditions, check for and remove any skinning that may occur.

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.
Airless Spray	Pump Ratio: 30:1 (min.) Volume Output: 3.0 gpm min. (12 lit/m) Material Hose: 3/8” I.D. min. Tip Size: 0.013-0.019” (0.43-0.53mm) Output Pressure: 1500-2000 psi (105-140kg/cm²) PTFE packings are recommended and available from the pump manufacturer.
Brush & Roller (General)	Multiple coats may be required to obtain desired appearance, recommended dry film thickness and adequate hiding. Avoid excessive re-brushing or re-rolling.
Brush	Use a medium natural bristle brush.
Roller	Use a short to medium-nap mohair roller cover with solvent resistant core.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	4°C (40°F)	2°C (35°F)	2°C (35°F)	20%
Maximum	29°C (85°F)	52°C (125°F)	52°C (125°F)	85%

Industry standards are for substrate temperatures to be 5°F (3°C) above the dew point. 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 staining of the product.

CURING SCHEDULE

Surface Temp.	Dry to Handle	Dry to Recoat
2°C (35°F)	36 Hours	20 Hours
10°C (50°F)	24 Hours	9 Hours
16°C (60°F)	18 Hours	6 Hours
24°C (75°F)	12 Hours	3 Hours

These times are based on recommended coverage rates. Curing under low humidity conditions will extend times. Maximum recoat for this product is 30 days. After this period, it is best to degloss the surface by abrasive blasting or sanding prior to recoating.

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 MSDS for this product. Employ normal workmanlike safety precautions.
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.

PACKAGING, HANDLING & STORAGE

Shelf Life	Part A: 24 months at 76°F (24°C) Part B: 24 months at 76°F (24°C) *Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.
Shipping Weight (Approximate)	1 Gallon Kit - 13 lbs (6 kg) 5 Gallon Kit - 67 lbs (30 kg)
Storage Temperature & Humidity	40 -110°F (4°C-43°C) 0-90% Relative Humidity
Flash Point (Setaflash)	Part A: 96°F (36°C) Part B: 75°F (24°C) Thinner 10: 83°F (28°C) Thinner 2: 23°F (-5°C)
Storage	Store Indoors. KEEP DRY.

WARRANTY

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