

SELECTION & SPECIFICATION DATA

Generic Type	Polyurethane primer/finish
Description	A two component direct to metal polyurethane, satin finish, with good durability & UV resistance. Carbothane 8830 produces a smooth, tough and easy to clean surface. Used in various industries where a durable, satin finish is required.
Features	• Direct to metal (no primer necessary) • Can paint a wide range of metallic substrates (carbon steel, galvanized, aluminium, etc) and non-metallic (concrete). • The paint is elastic and satin. • It has high build and outdoor resistance too. • Meets the requirements of corrosion category C2H, C3H, and C4H according to the ISO 12944 standard with the application of a single layer at the tested thickness. • Reaction to fire EN 13501-1 class B-s1, d0
Color	Supplied in most RAL & BS shades. A wide range of colors is available upon request using Carboline's Rapid Tint System (RTS). Contact your Carboline representative for RTS color availability.
Finish	Satin
Primer	Self-priming, epoxy, zinc rich epoxy or as recommended by Carboline
Dry Film Thickness	76 - 178 microns (3 - 7 mils) per coat
Solids Content	By Volume 60% +/- 2%
Theoretical Coverage Rate	23.6 m²/l at 25 microns (962 ft²/gal at 1.0 mils) 7.9 m²/l at 75 microns (321 ft²/gal at 3.0 mils) 3.4 m²/l at 175 microns (137 ft²/gal at 7.0 mils) Allow for loss in mixing and application.
VOC Values	As Supplied : 385 g/l These are nominal values and may vary slightly with color.
Dry Temp. Resistance	Continuous: 93°C (200°F) Non-Continuous: 121°C (250°F) Discoloration and loss of gloss is observed above 93°C (200°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 the adhesion of the coating.
Steel	Abrasive blast to a commercial finish in accordance with ISO 8501-1 Sa 2 (SSPC-SP6) and obtain a 1½ - 2 mil (35-50 micron) blast profile.
Galvanized Steel	Lightly abrade the galvanized substrate. Ensure the surface is free from oil, grease, dirt, and other contaminants. Perform adhesion tests to ensure proper, uniform, and acceptable adhesion of 8830 to the galvanized metal substrate.

Carbothane 8830 ST

PRODUCT DATA SHEET



SUBSTRATES & SURFACE PREPARATION

Concrete	Concrete must be cured 28 days at 24°C (75°F) and 50% relative humidity or equivalent. Prepare surfaces in accordance with ASTM D4258 Surface Cleaning of Concrete and ASTM D4259 Abrading Concrete. Voids in concrete may require surfacing.
Previously Painted Surfaces	Lightly sand to roughen and degloss the surface. Existing paint must attain a minimum 3B rating in accordance with ASTM D3359 "X-Scribe" adhesion test.
Non-Ferrous Metals	The surface roughness profile must be a dense angular from 38 to 75 microns (1.5-3 mil) and is best obtained through abrasive sweep blasting according to SSPC-SP 16 for atmospheric exposure.

MIXING & THINNING

Mixing	Power mix Part A separately, then combine with Part B and power mix. DO NOT MIX PARTIAL KITS.
Thinning	Up to 10% with Thinner 25 for all applications 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	4:1 Ratio (A to B) by volume
Pot Life	2 Hours at 24°C (75°F) and less at higher temps. 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. Spray equipment 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, 0.070" I.D. fluid tip and appropriate air cap.
Airless Spray	*Pump Ratio: 30:1 (min.) GPM Output: 3.0 (min.) Material Hose: 3/8" I.D. (min.) Tip Size: 0.015-0.017" Output PSI: 2100-2400 Filter Size: 60 mesh *PTFE packings are recommended and available from the pump manufacturer.
Brush & Roller (General)	Multiple coats may be required to obtain adequate hiding. Avoid excessive re-brushing or rerolling. For best results, tie-in within 10 minutes at 24°C (75°F).
Brush	Recommended for touch-up only. Use a medium, natural bristle brush.
Roller	Use a short-nap mohair roller cover with phenolic core.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	10°C (50°F)	4°C (39°F)	4°C (39°F)	10%
Maximum	35°C (95°F)	50°C (122°F)	35°C (95°F)	80%

Industry standards are for substrate temperatures to be 3°C(5°F) above the dew point. Caution: This product is moisture sensitive in the liquid stage and until fully cured. Protect from high humidity, dew and 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	Minimum Recoat Time	Maximum Recoat Time
23°C (73°F)	2 Hours	4 Hours	12 Hours	7 Days

These times are based on a 75 micron (3.0 mils) 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, 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 and use personal protective equipment as directed.
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 able to monitor levels, use MSHA / NIOSH approved respirator.
Caution	Contains flammable solvents, keep away from flames and sparks. All electrical installations must be grounded. In areas where there is a danger of explosion, operators must use non-ferrous tools.

PACKAGING, HANDLING & STORAGE

Shelf Life	Part A: Min. 24 months at 24°C (75°F) Part B: Min. 24 months at 24°C (75°F) *Shelf Life: when kept at recommended storage conditions and in original unopened containers.
Shipping Weight (Approximate)	20 Litre Kit: 27 kg
Storage Temperature & Humidity	4°C-43°C (40°F -110°F) 0-80% Relative Humidity
Storage	Store Indoors. This product is solvent based and not affected by excursions below these published storage temperatures, down to -12°C (10°F), for a duration of no more than 14 days. Always inspect the product prior to use to make sure it is smooth and homogeneous when properly mixed.

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PRODUCT DATA SHEET



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 to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. Carboline warrants our products to be free of manufacturing defects in accord with applicable Carboline quality control procedures. THIS WARRANTY IS NOT VALID WHEN THE PRODUCT IS NOT: (1) APPLIED IN ACCORDANCE WITH CARBOLINE'S SPECIFICATIONS, AND/OR (2) PROPERLY STORED, CURED, AND USED UNDER NORMAL OPERATING CONDITIONS. Carboline assumes no responsibility for coverage, performance, injuries, or damages resulting from use of the product. If this product is found not to perform as specified upon inspection by a Carboline representative during the warranty period, Carboline's sole obligation, if any, is to replace the Carboline product(s) proven to be defective or refund the purchase price thereof, at Carboline's sole option. Carboline shall not be liable for any other losses or damages. This warranty excludes (1) labor and costs of labor for the application or removal of any product, and (2) any incidental or consequential damages, whether based on breach of express or implied warranty, negligence, strict liability or any other legal theory. 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. The whole text of this Product Data Sheet, as well as the documents derived from it, have been written in English, and for legal purposes the English version shall prevail.