

SELECTION & SPECIFICATION DATA

Generic Type	Two component, acrylic, aliphatic polyurethane.
Description	Carbothane 8836 is a fast dry, high gloss, high build, two component polyurethane coating. Carbothane 8836 exhibits the excellent dry times and handling characteristics required by Original Equipment Manufacturers. This coating has outstanding hardness, adhesion and resistance to impact, marring, abrasion and staining. Carbothane 8836 is recommended as a direct to metal finish coat or as a finish coat over properly primed substrates. Typical applications include air compressors, propane tanks, trailer chassis and frames, valves, pumps, waste water treatment plant equipment, agricultural equipment, hazardous material storage buildings and general industrial equipment. Not recommended for continuous immersion service.
Features	<ul style="list-style-type: none"> • Low VOC – 2.8 pounds per gallon as supplied • Low HAPS • Direct-To-Metal (DTM) • Fast Dry – 60-90 minutes to touch at 75 °F (24 °C) • High build, high gloss • Application by conventional or airless spray, HVLP, Electrostatic or plural component spray • Ambient air or force cure with conventional or infrared ovens
Color	Available in a wide variety, formulated to customer requirements.
Finish	High Gloss
Primer	Self-priming, epoxy, zinc-rich epoxy or as recommended by Carboline.
Dry Film Thickness	3 - 5 mils (76 - 127 microns) per coat
Solids Content	By Volume 54% +/- 2%
Theoretical Coverage Rate	866 ft ² /gal at 1.0 mils (21.3 m ² /l at 25 microns) 289 ft ² /gal at 3.0 mils (7.1 m ² /l at 75 microns) 173 ft ² /gal at 5.0 mils (4.3 m ² /l at 125 microns) Allow for loss in mixing and application.
VOC Value(s)	Per EPA Method 24: 2.8 lbs./gal (336 g/l) 12.8 oz/gal of Thinner 25: 3.25 lbs./gal (390 g/l) These are nominal values and may vary slightly with color. 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 180 °F (82 °C).

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.
Steel	Abrasive blast to a minimum of commercial blast in accordance with NACE No. 3/SSPC-SP6 and obtain a 1½ – 2 mil (35-50 micron) blast profile.

SUBSTRATES & SURFACE PREPARATION

Phosphatized Steel	Apply 8836 directly to dry, properly phosphatized substrate. Perform adhesion tests to insure proper, uniform and acceptable adhesion of direct to phosphatized metal substrate.
Primed Surfaces	Remove all contaminants from the surface to be coated with Thinner 2 or Carboline Surface Cleaner 3 (refer to data sheet) in accordance with SSPC-SP1.

TYPICAL CHEMICAL RESISTANCE

Exposure	Fumes	Splashes & Spills
Acids	Excellent	Very Good
Alkalies	Excellent	Very Good
Salt	Excellent	Excellent
Solvents	Excellent	Good
Water	Excellent	Excellent

Test reports and additional data available upon written request.

Note: For splash/spillage for acids and alkalies, certain colors may discolor.

Note: For splash/spillage for solvents, resistance may vary dependent on the type of solvent involved.

MIXING & THINNING

Mixing	For plural component application equipment follow the equipment manufacturer's instructions. For batch mixing, power mix Part A separately, then combine and power mix thoroughly in the following proportions: THIS PRODUCT IS MOISTURE SENSITIVE. AVOID MOISTURE CONTAMINATION. DO NOT MIX PARTIAL KITS.
Thinning	Normally not required. May be thinned up to 12.8 oz./gal (10%) with Thinner 25. 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) 1 Gallon Kit Part A (8836): 0.8 gallons Part B Urethane Converter 8818: 25.6 fluid oz. 5 Gallon Kit Part A (8836): 4 gallons (5 gallon can) Part B Urethane Converter 8818: 1 gallon
Pot Life	2 hours at 75 °F (24 °C) unthinned. Pot life decreases at higher temperatures. Pot life ends when coating becomes too viscous to use. This product is moisture sensitive. Avoid moisture contamination.

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)	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, 0.070" I.D. fluid tip and appropriate air cap.

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Airless Spray	Pump Ratio: 30:1 (minimum)* GPM Output: 3.0 (minimum) Material Hose: 3/8" I.D. (minimum) Tip Size: 0.011-0.015" Output PSI: 2500-2800 Filter Size: 60 mesh *PTFE packings are recommended and available from the pump manufacturer.
Touch Up	Respray or brush. Brushing recommended only for touchup of small areas. Use natural bristle brush applying with full strokes.
Electrostatic	Contact Carboline for specific equipment recommendations.
HVLP	Contact Carboline for specific equipment recommendations.

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)	100°F (38°C)	90°F (32°C)	80%

Industry standards are for substrate temperatures to be 5 °F (3 °C) 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 Touch	Dry to Handle	Final Cure
75°F (24°C)	60 Minutes	6 Hours	10 Days

Higher film thickness, insufficient ventilation or cooler temperatures will require longer cure times and could result in solvent entrapment and premature failure. The use of Additive 8509 at a level of 1 to 1.5 fluid ounces per mixed gallon will speed the cure by 30% to 40%, but will shorten the pot life by 25% to 30%.

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, 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.

Carbothane[®] 8836

PRODUCT DATA SHEET



CLEANUP & SAFETY

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: 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) | 1 Gallon Kit - 15 lbs. (6 kg)
5 Gallon Kit - 58 lbs. (22 kg)
***Carbothane 8836 is also available in drum quantities.**

Flash Point (Setaflash) | Part A: 74 °F (23 °C)
Part B: 82 °F (28 °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.