

SELECTION & SPECIFICATION DATA

Generic Type	Two component, acrylic, aliphatic polyurethane.
Description	A fast dry, high gloss, high build, two component polyurethane coating. Carbothane 8815 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, chemicals and staining. Carbothane 8815 is recommended as a direct to metal finish coat or as a finish coat over properly primed substrates.
Features	<ul style="list-style-type: none"> • VOC compliant • Direct-To-Metal (DTM) • Very Fast Dry • High build, high gloss • Excellent abrasion resistance • Application by conventional or airless spray, HVLP, Electrostatic or plural component spray • Excellent chemical resistance • 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
Typical Uses	<ul style="list-style-type: none"> • Air compressors • Propane tanks • Trailer chassis and frames • Valves • Pumps • Waste water treatment plant equipment • Agricultural equipment • Hazardous material storage buildings • General industrial equipment
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 Values	As Supplied : 3.3 lbs/gal (395 g/l) Thinner 25 : 6 oz/gal: 3.5 lbs/gal (419 g/l) These are nominal values.
Dry Temp. Resistance	Continuous: 200°F (93°C) Non-Continuous: 250°F (121°C) Discoloration is observed above 180 °F (82 °C).
Limitations	Not recommended for continuous immersion service.

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 commercial finish in accordance with SSPC-SP6 and obtain a 1½ - 2 mil (38-50 micron) blast profile.
Phosphatized Steel	Apply 8815 directly to dry, properly phosphatized substrate. Perform adhesion tests to insure proper, uniform and acceptable adhesion of 8815 direct to phosphatized metal substrate.
Primed Surfaces	Remove any oil or grease 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	Very Good
Water	Excellent	Excellent

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

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

MIXING & THINNING

Mixing	<p>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 ratio proportions listed below.</p> <p>NOTE: This product is moisture sensitive. Avoid moisture contamination. DO NOT MIX PARTIAL KITS.</p>
Thinning	<p>Normally not required. May be thinned up to 6 oz/gal (5%) with Thinner 25. Thinner 97 used when applying 8815 in very hot conditions.</p> <p>Use of thinners other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.</p>
Ratio	<p>4:1 Ratio (A to B)</p> <p>1 Gallon Kit Part A (8815): .8 gallons (1 gallon can) Urethane Converter 8800: 0.2 gallons</p> <p>5 Gallon Kit Part A (8815): 4 gallons (5 gallon can) Urethane Converter 8800: 1 gallon</p>
Pot Life	<p>30-45 minutes at 75 °F (24 °C) unthinned. Pot life decreases at higher temperatures.</p> <p>Pot life ends when coating becomes too viscous to use. This product is moisture sensitive. Avoid moisture contamination.</p>

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.

Airless Spray

Pump Ratio: 30:1*(min.)
GPM Output: 3.0 (min.)
Material Hose: 3/8" I.D. (min.)
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 touch up 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 for at least four hours after application @ 75 °F (24 °C). Application and/or curing in humidities above maximum, or exposure to moisture from rain or dew may result in 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)	25 Minutes	100 Minutes	10 Days

These times are based on a 4.0 mil (125 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.

Force Cure

Oven Temperature at 125 °F (52 °C)

- **Flash Time:** 15 Minutes
- **Oven Dwell Time:** 30 Minutes
- **Cool Down Time:** 10 Minutes

Oven Temperature at 180 °F (82 °C)

- **Flash Time:** 15 Minutes
- **Oven Dwell Time:** 10 Minutes
- **Cool Down Time:** 5 Minutes

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.
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 nonferrous tools and wear conductive and nonsparking 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 Shipping Weight 8815 (Approximate): 15 lbs. (6 kg) Thinner 25: 8 lbs. (4 kg) Thinner 97: 8 lbs. (4 kg) 5 Gallon Kit Shipping Weight 8815 (Approximate): 58 lbs. (22 kg) Thinner 25: 41 lbs. (19 kg) Thinner 97: 41 lbs. (19 kg) *Carbothane 8815 is also available in drum quantities.
Flash Point (Setaflash)	Part A: 58 °F (14 °C) Part B: 28 °F (-2 °C) Thinner 25: 90 °F (32 °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.