

## SELECTION & SPECIFICATION DATA

<b>Generic Type</b>	Polyamide Epoxy
<b>Description</b>	Carboguard 825 is a high solids, low VOC, quick cure, high build epoxy with excellent chemical and abrasion resistance. It is designed for use in industrial and marine environments to provide superior protection on steel and concrete surfaces. Carboguard 825 can be applied to blasted or marginally prepared steel. Because Carboguard 825 is a high build coating it is an excellent choice for use on objects with sharp edges, numerous angles and welds. The fast setting properties make it a good choice for use in steel fabrication facilities. This product may also be used as a maintenance coating, providing outstanding protection and fast return to service.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Fast cure</li> <li>• VOC compliant</li> <li>• Excellent edge retention</li> <li>• Surface tolerant</li> </ul>
<b>Color</b>	Refer to Carboline color chart.
<b>Finish</b>	Semi-Gloss
<b>Primer</b>	This product may be applied directly to steel and concrete surfaces
<b>Dry Film Thickness</b>	3 - 9 mils (76 - 229 microns) per coat
<b>Solids Content</b>	By Volume 68% +/- 2%
<b>Theoretical Coverage Rate</b>	1091 ft <sup>2</sup> /gal at 1.0 mils (26.8 m <sup>2</sup> /l at 25 microns) 364 ft <sup>2</sup> /gal at 3.0 mils (8.9 m <sup>2</sup> /l at 75 microns) 121 ft <sup>2</sup> /gal at 9.0 mils (3.0 m <sup>2</sup> /l at 225 microns) Allow for loss in mixing and application.
<b>VOC Values</b>	<b>As Supplied</b> : 2.24 lbs/gal (268 g/l) Thinner 248 : 18 oz thinner = 2.83 lbs/gal (340 g/l)

## SUBSTRATES & SURFACE PREPARATION

<b>General</b>	All surfaces must be thoroughly cleaned to remove dirt, grease, mill scale, loose rust, chalk, and any other contaminants that can reduce adhesion via SSPC-SP1 solvent cleaning.
<b>Galvanized Steel</b>	Allow to weather for 6 months prior to coating, if weather is not practical clean new galvanized surfaces as per SSPC-SP1 then brush blast per SSPC-SP16. Consult your Carboline Sales Representative for specific recommendations.
<b>Aluminum</b>	Clean as with all surfaces then brush blast per SSPC-SP16.
<b>Concrete or CMU</b>	Prep to SSPC-SP13, masonry surfaces must cure for at least 30 days at 70 °F before painting. Remove loose or excess mortar, efflorescence, laitance and concrete form release compounds. Etch or abrasive blast slick or glazed, or powdery concrete.
<b>Previously Painted Surfaces</b>	If the paint is glossy, sand to dull the surface. Apply test areas, allow to cure, and test for adhesion and compatibility with existing coatings. Scrape loose, scaly, peeling paint and sand the edges smooth. Remove any rust and scale from ferrous metal. If mildew is present, remove completely by sterilizing the surface with mildew remover and detergent. Rinse well and allow to dry before painting.

# Carboguard<sup>®</sup> 825

## PRODUCT DATA SHEET



### SUBSTRATES & SURFACE PREPARATION

**New Steel** | SSPC-SP 6 with 1.5-3 mil surface profile, SSPC-SP10 for severe exposures. SSPC-SP2 or SSPC-SP3 are suitable for mild environments.

### MIXING & THINNING

**Mixing** | Thoroughly power mix each component separately. Pour component B into component A and power mix well.

**Thinning** | May be thinned up to 18 oz/gal (15%) with Thinner 248. Use of thinners other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether expressed or implied. Carboline Thinner 236E may also be used to thin this product to minimize HAP and VOC emissions. Consult Carboline Technical Service for guidance.

**Ratio** | 1:1 mix ratio by volume (Part A to Part B)

**Pot Life** | 2 hours at 75 °F

**Induction Time** | 30 minutes in cooler temperatures (35-55 °F) and 15 min at 55-85 °F.

### 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 equipment manufacturers.

**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: 0.017-0.021"  
Output PSI: 2100-2300  
Filter Size: 60 mesh  
\*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 rebrushing or rerolling. For best results, tie-in within 10 minutes at 75 °F (24 °C).

**Brush** | Use a medium bristle brush.

**Roller** | Use a short or medium nap synthetic roller cover with phenolic core.

### APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	35°F (2°C)	35°F (2°C)	0%
Maximum	90°F (32°C)	135°F (57°C)	120°F (49°C)	85%

## CURING SCHEDULE

Surface Temp.	Dry to Handle	Dry to Recoat & Topcoat w/ other finishes	Final Cure General
35°F (2°C)	8 Hours	8 Hours	3 Days
50°F (10°C)	6 Hours	6 Hours	2 Days
75°F (24°C)	4 Hours	4 Hours	24 Hours
90°F (32°C)	2 Hours	2 Hours	12 Hours

Dry times are calculated with a 6.0 mil wet film @ 50% relative humidity. Expect longer dry times in periods of higher humidity or lower temperatures or when applying thicker films. If the maximum recoat window is exceeded the film must be mechanically abraded before recoating. Maximum recoat time is 3 months without special surface preparation. "Loose" chalk must be removed in accordance with good painting practice. If the maximum recoat time has been exceeded, the surface must be abraded by sweep blasting or sanding prior to the application of additional coats.

## CLEANUP & SAFETY

<b>Cleanup</b>	Use Thinner 2 or Acetone. In case of spillage, absorb and dispose of in accordance with local applicable regulations.
<b>Safety</b>	Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal workmanlike safety precautions. Keep container closed when not in use.
<b>Ventilation</b>	When used in enclosed areas and thinned, 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 respirator.

## PACKAGING, HANDLING & STORAGE

<b>Shelf Life</b>	Part A: 36 months Part B: 36 months
<b>Storage Temperature &amp; Humidity</b>	40-110 °F (4-43 °C) 0-100% relative humidity. Store indoors
<b>Storage</b>	Store Indoors
<b>Shipping Weight (Approximate)</b>	2 Gallon Kit - 29 lbs (13 kg) 10 Gallon Kit - 137 lbs (62 kg)
<b>Flash Point (Setaflash)</b>	Part A 76 °F (24 °C) Part B 80 °F (27 °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.