

## SELECTION & SPECIFICATION DATA

<b>Generic Type</b>	High chemical resistant epoxy lining
<b>Description</b>	Carboguard 896 is a two component, high solids, modified epoxy formulated for use as a protective hopper lining with excellent resistance to fugitive acetic and hydrochloric acids often found in many plastic pellet cargoes.
<b>Features</b>	Meets requirements of 21CFR 175.300
<b>Typical Uses</b>	Dry bulk service for hopper cars carrying EVA, PTA, polyethylene (PE), polypropylene (PP), polystyrene (PS), polyvinyl chloride (PVC) plastic pellets, and other commodities, which may contain residual process acid.
<b>Color</b>	Beige (1872), Blue (V157)
<b>Finish</b>	High Gloss
<b>Primer</b>	Welds should be striped with Carboguard 896S
<b>Wet Film Thickness</b>	7 to 8 mils per coat
<b>Dry Film Thickness</b>	5 - 7 mils (127 - 178 microns) per coat Two contrasting color coats are recommended to achieve a 10-14 total DFT.
<b>Solids Content</b>	By Volume 66% +/- 3%
<b>Theoretical Coverage Rate</b>	1059 ft <sup>2</sup> /gal at 1.0 mils (26.0 m <sup>2</sup> /l at 25 microns) 212 ft <sup>2</sup> /gal at 5.0 mils (5.2 m <sup>2</sup> /l at 125 microns) 151 ft <sup>2</sup> /gal at 7.0 mils (3.7 m <sup>2</sup> /l at 175 microns) Allow for loss in mixing and application.
<b>VOC Values</b>	Thinner 231 : 10%: 2.747 lbs/gal (329 g/l) Thinner 245 : 10%: 2.77 lbs/gal (332 g/l) <b>As Supplied</b> : 2.35 lbs/gal (282 g/l)
<b>Dry Temp. Resistance</b>	Continuous: 225°F (107°C)
<b>Limitations</b>	Epoxies may lose gloss, discolor and chalk when exposed to sunlight.

## SUBSTRATES & SURFACE PREPARATION

<b>General</b>	Surfaces must be clean and dry. Remove all dirt, dust, oil and all other contaminants.
<b>Steel</b>	Abrasive blast to SSPC-SP6, Commercial Blast. Anchor (surface) profile should be a sharp, angular and dense 2.5 to 3.5 mil profile.

## MIXING & THINNING

<b>Thinning</b>	Thin up to 10% by volume with Thinner 231 or Thinner 245. Use Thinner 245 for finish coat.
<b>Ratio</b>	1:1 by volume (Part A to Part B)
<b>Pot Life</b>	3 hours at 77 °F (25 °C)

### 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.

**Airless Spray** | • Pump Ratio: 45:1  
• Gun Tip: 0.017" to 0.019"  
• Output PSI: 2,800 minimum fluid pressure at tip to obtain proper atomization

**Brush** | A small brush can be used for touch-up or small repair areas.

### APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	70°F (21°C)	60°F (16°C)	50°F (10°C)	0%
Maximum	90°F (32°C)	90°F (32°C)	90°F (32°C)	90%

Metal temperature at least 5 deg. above the dew point

### CURING SCHEDULE

Surface Temp.	Set to Touch	Tack Free	Dry Hard	Dry to Recoat
75°F (24°C)	3 Hours	6 Hours	10 Hours	12 Hours

**Note:** Normal recoat window is within 30 days at 75 °F (24 °C).

**Air Dry Schedule:** Circulate warm air at 85-90°F (29-32 °C) for 12 hours minimum. Perform holiday test for discontinuities. All touch-ups must be made before force cure.

**Force Cure Schedule:** Contact Carboline Technical Service for specific force curing information.

### CLEANUP & SAFETY

**Cleanup** | Use Thinner 2 or Acetone.

**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.

### PACKAGING, HANDLING & STORAGE

**Packaging** | **10 gallon kits:**  
Part A: 5 gallons in a 5 gallon pail  
Part B: 5 gallons in a 5 gallon pail

**Shelf Life** | Part A: 12 months  
Part B: 12 months

**Shipping Weight (Approximate)** | Part A - 10.92 lbs/gal  
Part B - 11.14 lbs/gal

**Flash Point (Setaflash)** | Part A: 61 °F (16 °C)  
Part B: 81 °F (27 °C)

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## 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.