

SELECTION & SPECIFICATION DATA

Generic Type	Proprietary epoxy blend
Description	Rustbond PS is a very low VOC epoxy primer/sealer that combines outstanding surface tolerance characteristics over marginally prepared substrates and user-friendly features. It accepts a variety of topcoats and can help save time and money by minimizing surface preparation requirements for new construction, maintenance and overcoating projects. Rustbond PS has good pot life at higher temperatures to help minimize waste and also cures at low temperatures down to 35°F (1.7°C) with Additive 8505 so you have one Rustbond product for year-round application.
Features	<ul style="list-style-type: none"> • Excellent wicking characteristics resulting in very good adhesion to a variety of substrates • Low stress during application and cure, can be applied over aged coatings and tight rust • Universal primer and tie-coat • Very low VOC, less than 100 g/l, and low odor for compliance in many stringent locations • Low temperature cure with Additive 8505 to extend the painting season • Good pot life in hotter weather without Additive 8505, one Rustbond PS for year-round application • User-friendly application with brush, roller, and spray • Tolerates higher dry film thickness (DFT) range, easier to apply • Excellent sealer for metalizing and thermal sprayed aluminum (TSA)
Color	Translucent Green (0300)
Finish	Gloss
Primer	Self-priming. May be applied over most generic types of coatings.
Dry Film Thickness	1 - 3 mils (25 - 76 microns) .
Solid(s) Content	By Volume 90% +/- 1%
Theoretical Coverage Rates	722 sq. ft./gal at 2 mils (35 m/l at 50 microns) Allow for loss in mixing and application.
VOC Values	<p>As Supplied : 0.8 lbs./gal (96 g/l) EPA Method 24 Thinner 225 E : Thinned 5% 0.8 lbs./gal (96 g/l) Thinner 76 : Thinned 5% 0.98 lbs/gal (117 g/l)</p> <p>These are nominal values.</p>
Dry Temp. Resistance	Continuous: 175°F (79°C) Non-Continuous: 200°F (93°C)
Limitations	<ul style="list-style-type: none"> • Rustbond PS must be topcoated • Not recommended for immersion service • Rustbond PS may not be used with fireproofing, except as a primer under epoxy-based intumescent fireproofing
Topcoats	Water borne acrylics, alkyds, epoxies, polyurethanes, polyaspartics, polysiloxanes, etc. Consult your Carboline Sales Representative for specific recommendations

SUBSTRATES & SURFACE PREPARATION

General | Surfaces must be clean and dry. Remove contaminants in accordance with SSPC-SP 1.

SUBSTRATES & SURFACE PREPARATION

Steel	Minimum Hand Tool Clean or Power Tool Clean in accordance with SSPC-SP 2 or SSPC-SP 3.
Concrete or CMU	Concrete shall be designed, placed, cured, and prepared per NACE No. 6/SSPC-SP 13 latest edition. Abrade to remove all laitance, loose concrete, etc. and to create a surface profile in accordance with the appropriate ICRI CSP standard for the coating system. This product will penetrate into the pores of the concrete and should be applied at approximately 722 square feet per gallon (18 square meters per liter).
Previously Painted Surfaces	Clean to remove contaminants in accordance with SSPC-SP 1. Test patches of the new coating system are recommended to verify compatibility and acceptable adhesion. Carboline recommends testing adhesion per ASTM D3359 Method A with a minimum 3A rating.
Phosphatized Steel	Clean to remove contaminants in accordance with SSPC-SP 1.
Non-Ferrous Metals	Surface profile should be a dense angular 1.5 - 3 mils and is best achieved through abrasive blasting in accordance with SSPC-SP16 for atmospheric exposure.

MIXING & THINNING

Mixing	Power mix components separately at low speed to avoid whipping air into the product. Continue mixing until all solids are mixed into suspension. Scrape the sides of the container occasionally to insure uniformity. Combine the two components together in the Part A container and continue mixing for 1-3 minutes until components are thoroughly mixed together with a uniform consistency. DO NOT MIX PARTIAL KITS.
Thinning	<p>Preferred Thinner Uses and Application: Thinning is not normally required. May be thinned up to 5% with Thinner 76 or Thinner 225 E to help with atomization when spraying.</p> <p>Use of thinners other than those recommended and supplied by Carboline may adversely effect product performance and void product warranty, whether expressed or implied.</p>
Ratio	<p>2:1 Ratio (A to B) 3 Gallon Kit Part A: 2 gal. in a 5 gal. pail Part B: 1 gal. can 3 quart kit Part A: 1/2 gal. in a 1 gal. can Part B: 1 quart in a quart can</p>
Pot Life	<p>3 hours at 40°F (4°C) *With Additive 8505 90 minutes at 70°F (21°C) 70 minutes at 70°F (21°C) *With Additive 8505 75 minutes at 90°F (32°C) Pot life ends when material begins to thicken.</p> <p>*Additive 8505 can be added at a rate of 1.5 oz per mixed 3 quart kit or 6 oz per mixed 3 gallon kit to speed the cure at temperatures at or below 70°F (21°C). See the Curing Schedule.</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)	This high solids product builds dry film thickness very fast. Thinning up to a maximum 5% with Thinner 76 or Thinner 225 E will help with atomization. The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss, Graco, etc.
Airless Spray	Pump Ratio: 30:1 (min. recommended)* GPM Output: 3.0 (min. recommended) Output Pressure: 2,000-2,400 psi (138-165 bar) Material Hose: 3/8" I.D., (0.95 cm) min. recommended Tip Size: 0.011 - 0.015" (0.03 - 0.04 cm) recommended *PTFE packings are recommended and available from the equipment manufacturer.
Brush & Roller (General)	Avoid excessive brushing or rolling. Apply enough material to uniformly wet out the surface and do not apply excessive thickness.
Brush	A high quality bristle brush is recommended.
Roller	A high quality shed resistant and solvent resistant medium nap roller cover is recommended.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	40°F (4°C)	35°F (2°C)	35°F (2°C)	0%
Maximum	90°F (32°C)	110°F (43°C)	100°F (38°C)	90%

This product simply requires the substrate temperature to be above the dew point. During high humidity conditions it is recommended that the application be done while temperatures are increasing. Condensation forming on uncured coating due to substrate temperatures below the dew point can cause amine blush to form. Amine blush must be removed by washing with clean potable water before top coating. Special application techniques may be required above or below normal application conditions.

CURING SCHEDULE

Surface Temp.	Minimum Dry To Topcoat	*Minimum Dry To Topcoat With Additive 8505	Maximum Recoat Time Acrylics & Alkyds	Maximum Recoat Time Epoxies & Urethanes
35°F (2°C)	NR	16 Hours	14 Days	30 Days
50°F (10°C)	NR	10 Hours	14 Days	30 Days
60°F (16°C)	11 Hours	5 Hours	14 Days	30 Days
70°F (21°C)	6 Hours	5 Hours	14 Days	30 Days
90°F (32°C)	4 Hours	NR	7 Days	15 Days
100°F (38°C)	2.25 Hours	NR	5 Days	10 Days

These times are based on 50% relative humidity and 2.0 mil (50 micron) dry film thickness. Higher film thickness, insufficient ventilation and/or cooler temperatures will require longer cure times and could result in solvent entrapment and premature failure. *At temperatures below 70°F (21°C) Carboline Additive 8505 can be added at a rate of 1.5 oz per mixed 3 quart kit of Part A and B or 6 oz per mixed 3 gallon kit to speed up the cure time.

CLEANUP & SAFETY

Cleanup	Use Thinner 76, Thinner 2 or Acetone. In case of spillage, absorb and dispose of in accordance with local applicable regulations.
----------------	---

CLEANUP & SAFETY

Safety	Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal workmanlike safety precautions.
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 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 non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Shelf Life	Part A & B: Min. 24 months at 75°F (24°C) When kept indoors and in original unopened containers.
Storage Temperature & Humidity	40-110°F (4-43°C) 0-90% Relative Humidity
Storage	Store Indoors.
Shipping Weight (Approximate)	3 Gallon Kit - 37 lbs. (16.8 kg) 3 Quart Kit - 10 lbs. (2.8 kg)
Flash Point (Setaflash)	• Part A: 145°F (63°C) • Part B: 160°F (71°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.