Rustbond NG FC

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Polymeric Epoxy Amine
Description	Rustbond NG FC is a cross-linked penetrating primer/sealer with good wetting properties. It is highly flexible and accepts a variety of topcoats. Recommended use as primer/sealers for marginally prepared steel and over old coatings. Its excellent wetting properties allows it to penetrate rust and discontinuities in existing coatings and provide a firm anchorage for a variety of topcoats.
Features	• Universal primer and tie-coat. • Cures down to 2°C (36°F). • Excellent adhesion to SSPC-SP 2 prepared steel, galvanizing, aluminum, stainless steel. • Highly flexible film. • High solids. • Low odor. • Contains corrosion inhibitors. • Compatible with a variety of topcoats . • User friendly brush and roller application.
Color	Translucent yellow.
Finish	Gloss Chalks rapidly in sunlight.
Primer	Self-priming. May be applied over most generic types of coatings.
Dry Film Thickness	25 - 51 microns (1 - 2 mils) per coat
Solids Content	By Volume 90% +/- 1%
Theoretical Coverage Rate	35.4 m²/l at 25 microns (1444 ft²/gal at 1.0 mils) 17.7 m²/l at 50 microns (722 ft²/gal at 2.0 mils) Allow for loss in mixing and application.
VOC Values	**As Supplied** : 110 g/l Thinner 2 : 7%: 150 g/l Thinner 76 : 7%: 150 g/l These are nominal values
Dry Temp. Resistance	Continuous: 79°C (174°F) Non-Continuous: 93°C (199°F) Discoloration and loss of gloss is observed above 80°C.
Limitations	• Epoxies lose gloss, discolor and chalk in sunlight exposure. • **Do not use for immersion service.** • Rustbond sealers must be topcoated.
Topcoats	Acrylics, Alkyds, Epoxies, Polyurethanes.

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	SSPC-SP2 or SP3
Previously Painted Surfaces	A test patch is recommended to verify compatibility with existing coating. Existing paint must attain a minimum 3A-3B rating in accordance with ASTM D3359 adhesion test.

MIXING & THINNING

Mixing	Power mix components separately to break down any gel. Keep the mixing blade at slow speed and submerged in the product to minimize whipping of air into the material. Scrape the sides of the container occasionally to insure uniformity. Continue to mix for 1-2 minutes. DO NOT MIX PARTIAL KITS.
Thinning	Thinning not normally required but may be thinned up to 7% with Thinner #76 or Thinner #2. Use of thinners other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether express or implied.
Ratio	**5 Liters Kit:** Part A: 2.5 L Part B: 2.5 L **20 Liters Kit:** Part A: 10 L Part B: 10 L
Pot Life	For 2 Liter sample: 2 h at 30°C 4 h at 25°C 7 h at 7°C Pot life ends when material begins to thicken and exotherm.

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	Contact Carboline Technical Service for specific application instructions.
Brush & Roller (General)	Avoid excessive re-brushing or re-rolling. Apply enough material to uniformly wet the surface. Any puddles formed must be brushed out.
Brush	Use a medium bristle brush and distribute evenly using full brush strokes.
Roller	Use a medium to long nap roller suitable for solvent base materials to evenly distribute the material.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	4°C (39°F)	2°C (36°F)	2°C (36°F)	0%
Maximum	30°C (86°F)	45°C (113°F)	38°C (100°F)	90%

This product requires the substrate temperature to be 3°C above the dew point. Condensation due to substrate temperatures below the dew point can cause flash rusting on prepared steel and interfere with proper adhesion to the substrate. Special application techniques may be required above or below normal application conditions.

CURING SCHEDULE

Surface Temp.	Dry to Handle	Dry to Topcoat	Final Cure General
5°C (41°F)	7 Days	5 Days	14 Days
10°C (50°F)	48 Hours	48 Hours	9 Days
24°C (75°F)	18 Hours	14 Hours	7 Days
32°C (90°F)	14 Hours	5 Hours	2 Days

These times are based on 50% relative humidity and 25-50 microns 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. Excessive humidity or condensation on the surface during curing can interfere with the cure, can cause discoloration and may result in a surface haze. Any haze or blush must be removed by water washing before recoating. During high humidity conditions, it is recommended that the application be done while temperatures are increasing.

Surface Temp.	Maximum Recoat Time Acrylics & Alkyds	Maximum Recoat Time Epoxies & Urethanes
2°C (36°F)	7 Days	21 Days
10°C (50°F)	7 Days	21 Days
24°C (75°F)	7 Days	21 Days
30°C (86°F)	7 Days	14 Days

CLEANUP & SAFETY

Cleanup
Use Thinner#2. 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.

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 EXOTHERMS AT THE END OF ITS POT LIFE.
Any unused quantities will become hot (70°C). Immediately spread out on an appropriate surface or add sand or other suitable heat sink to the unused material to reduce the severity of exotherm. Take appropriate precautions against breathing fumes.
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 & Part B: Min. 24 months at 24°C (75°F) Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.
Shipping Weight (Approximate)	5 Liters Kit: 7.2 kg 20 Liters Kit: 24.5 kg
Storage Temperature & Humidity	4°-43°C 0-90% Relative Humidity
Flash Point (Setaflash)	Part A: 96°C (205°F) Part B: 10°C (50°F)
Storage	Store Indoors.

WARRANTY

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