Novocoat SC5400 Series

SELECTION & SPECIFICATION DATA

Generic Type
Cycloaliphatic Amine Cured Novolac Epoxy

Description
Densely cross-linked 100% solids, novolac epoxy coating with excellent chemical and temperature resistance against organic acids, caustics and petroleum based products. May be used for floors, secondary containment, fume ducts, piping, and bulk storage tanks.

Features
- Excellent chemical resistance to wide range of acids and caustics
- Low Permeation Rate for tank lining service
- Solvent free – 100% solids
- Plural or single leg application
- Quick Return to Service (24 hours at 77°F for hydrocarbon immersion service)

Recommended Uses
- Floor and chemical trenches in process areas
- Secondary Containment areas
- Tube Sheets
- Chemical Process Equipment & Pads exposed to acids
- Heat Exchangers
- Internal pipeline and vessel linings

Color
Light Gray (SC5410), Dark Gray (SC5420)

Finish
Gloss

Primer
Self-priming

Dry Film Thickness
2 – 3 coats at 10 – 12 mils each
3 – 4 coats at 10 – 12 mils each for high temps/severe chemical service

Solids Content
By Volume 100% +/- 1%

Theoretical Coverage Rate
1604 ft^2 at 1 mil
106 ft^2 at 15 mils
64 ft^2 at 25 mils
Allow for loss in mixing and application.

Dry Temp. Resistance
Continuous: 450°F (232°C)
Non-Continuous: 500°F (260°C)
Discoloration and loss of gloss occurs above 200°F (93°C) but does not affect performance.

Under Insulation Resistance
Continuous: 300°F (149°C)

Discoloration and loss of gloss occurs above 200°F (93°C) but does not affect performance.

SUBSTRATES & SURFACE PREPARATION

General
Surfaces must be clean and dry. Remove all dirt, dust, oil and all other contaminant.

Steel
Immersion: SSPC-SP10 Near White with jagged profile of 2.5 – 3.5 mils.

Non-immersion: SSPC-SP6 1.5-3.0 mils SSPC-SP2 or SP3 are suitable cleaning methods for mild environments.

Concrete or CMU
Concrete must be cured 28 days at 75°F (24°C) and 50% relative humidity or equivalent. Prepare surfaces in accordance with ASTM D4258 Surface Cleaning of Concrete and ASTM D4259 Abrading Concrete. Voids in concrete may require surfacing. Mortar joints should be cured a min of 15 days. Prime with Novocoat SC1100 Concrete Primer

Previously Painted Surfaces
Consult with ErgonArmor Technical Service Department

MIXING & THINNING

Mixing
Power mix separately, then combine and power mix. DO NOT MIX PARTIAL KITS.

Thinning
Spray: Up to 6.5 oz/gal (5%) w/ TH1710
Brush: Up to 12.8 oz/gal (10%) w/ TH1710
Roller: Up to 12.8 oz/gal (10%) w/ TH1710

Use of thinners other than those supplied or recommended by ErgonArmor may adversely affect product performance and void product warranty, whether expressed or implied.

Ratio
3:1 Ratio (A to B) by Volume

Pot Life
30 minutes at 75°F (24°C)
Pot life times will be less at higher temperatures.

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 is a 100% solids coating and may require adjustments in spray techniques. Wet film thickness is easily and quickly achieved. The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.

Airless Spray Plural Component
Tip Size: .027 – .029 reversible type
Diameter of Part A Fluid Line: 1/2" ID
Diameter of Part B Fluid Line: 3/8" ID
Spray Line: 1/2" ID x 50 feet maximum
Diameter of Whip: 1/4 – 3/8" ID
Length of Whip: 20 feet
Power Ratio Pump: 56:1 or greater
Static Mixer: 2 x 1/2" ID x 12"
in length behind mixing valve
Part A Temperature: 130 – 135°F in reservoir tank
Part B Temperature: 90 – 95°F in reservoir tank

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Airless Spray Single Leg or Hot Pot
Pump Ratio: 56:1 (min.)
Hose Length/Diameter: 50 ft x 3/8" I.D. (min.)
Whip Length/Diameter: 10 ft x 1/4" – 3/8" I.D. (min.)
Tip Size: .027" – .029"
Output PSI: 5600 – 7000 Filter Removed

Brush & Roller (General)
Multiple coats may be required to obtain desired appearance, recommended dry film thickness and adequate hiding. Avoid excessive re-brushing or re-rolling. For best results, tie-in within 10 minutes at 75°F (24°C).

Brush
Use a medium bristle brush.

Roller
Use a short-nap synthetic roller cover with phenolic core.

CLEANUP & SAFETY

Cleanup
Use MEK 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 MSDS for this product. Wear protective clothing, gloves and use protective cream on face, hands and all exposed areas.

Ventilation
When used as a tank lining or in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. User should test and monitor exposure levels to insure all personnel are below guidelines.

PACKAGING, HANDLING & STORAGE

Shelf Life
Part A: 12 months at 75°F (24°C)
Part B: 12 months at 75°F (24°C)
*When kept at recommended storage conditions and in original unopened containers.

Shipping Weight (Approximate)
4 x 800 gram repair kit: 9 lbs (4.09 kg)
1 Gallon Kit: 13 lbs (6 kg)
4 Gallon Kit: 55 lbs (25 kg)
200 Gallon Drum Kit: 2,560 lbs (1,164 kg)

Storage Temperature & Humidity
40° – 110°F (4° – 43°C)
0 – 100% Relative Humidity

Storage
Store Indoors.
This product is not affected by excursions below these published storage temperatures, down to 10°F, for a duration of no more than 14 days. Always inspect the product prior to use to make sure it is smooth and homogeneous when properly mixed.

PERFORMANCE DATA

TEST METHOD	SYSTEM	RESULTS
ASTM D-4541 Dry (Adhesion Test)	Blasted Steel 1 ct. SC5400	>2,500 psi
ASTM D-4541 Wet 5 days 70°C water (Adhesion Test)	Blasted Steel 1 ct. SC5400	>2,500 psi
ASTM D 4060 Abrasion	Blasted Steel 1 ct. SC5400	17 mg. loss per 1000 cycles, CS17 wheel 1000 gm. load 0.1mil loss per 1000 cycles
ASTM C-109 Compressive Strength	SC5400	10,000 – 13,000 psi
ASTM D-2240 Hardness	Blasted Steel 1 ct. SC5400	84 Shore D

CURE SCHEDULE & RE-COAT WINDOW

TEMPERATURE	MINIMUM RE-COAT	MAXIMUM RE-COAT	RETURN TO SERVICE (AQUEOUS/ HYDROCARBON IMMERSION)
10°C (50°F)	8 hours	24 hours	7 days
25°C (77°F)	3 hours	12 hours	24 hours
60°C (140°F)	30 minutes	Not recommended	4 hours
DRY TO TOUCH 4 hours at 25°C (77°F)			

Rev 05/18

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