



SELECTION & SPECIFICATION DATA

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| Type | Cycloaliphatic Amine Cured Novolac Epoxy |
| Description | Novocoat SC2200 Rapid Set Pipe Coating is a 100% solids novolac epoxy coating that is fast-setting and cures down to 0°F (-17°C). Cured films up to 40 mils DFT provide an excellent balance of flexibility and toughness making it highly versatile for a variety of petrochemical and industrial applications. Novocoat SC2200 Rapid Set Pipe Coating is available in spray grade (plural component application only) and bag kits for brush, roller, or trowel applied touch-up and girth weld repairs. |
| Features | <ul style="list-style-type: none"> • 100% solids, no VOCs • 40 mils per coat in a single coat application • Resistance to cathodic disbondment • Good flexibility at colder temperatures • Good abrasion and impact resistance • Excellent thermal cycling properties • Excellent corrosion protection • Quick return-to-service |
| Uses | <ul style="list-style-type: none"> • External pipe lining • Internal pipeline and vessel lining • Girth weld coating • High performance tank lining |
| Color | Putty |
| Finish | Gloss |
| Dry Film Thickness (DFT) | Total Dry Film Thickness (TDFT) should range 20 – 40 mils per coat for optimum performance. This range of thickness is achievable in a single coat with proper atomization, good technique, and proper substrate temperature. For applications requiring TDFT's above 50 mils, two coats should be applied. |
| Solids Content | 99 – 100% by volume |

SUBSTRATES & SURFACE PREPARATION

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| All | Substrate must be clean, dry and free of contaminants. |
| Steel | <p>Immersion: SSPC-SP 10/NACE 2 Near White Metal Blast with angular profile of 2.5 – 3.5 mils.</p> <p>Non-immersion: SSPC-SP 6/NACE 3 Commercial Blast with angular profile of 1.5 – 3.0 mils, SSPC-SP 2 Hand Tool or SSPC-SP 3 Power Tool Cleaning are suitable for mild environments.</p> <p>Self-priming on steel.</p> |
| Previously Painted Surfaces | Consult with ErgonArmor Technical Service. |

MIXING & THINNING

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| Ratio | 3A:1B by volume |
| Mixing | Due to the rapid set of this material, plural spray is the only method recommended for application other than for girth weld repairs. |
| Thinning | Consult with ErgonArmor representative before adding thinner to product or using hose lengths/diameters outside the stated recommendations. |
| Pot Life | <p>35 minutes at 41°F (5°C)</p> <p>25 minutes at 59°F (15°C)</p> <p>17 minutes at 77°F (25°C)</p> <p>9 minutes at 95°F (35°C)</p> <p>Pot life is shorter at higher temperatures. A larger volume of mixed material will have a shorter pot life than a smaller volume.</p> |
| Cleanup | MEK or Acetone |

APPLICATION GUIDANCE

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| Temperature | Substrate temperature should be 35°F – 110°F (2°C – 43°C) and a minimum of 5°F (3°C) above the dew point to achieve best adhesion. Maximum substrate temperature should be kept to 140°F (60°C). Contact ErgonArmor for conditions where the substrate temperature exceeds 140°F (60°C). |
| Spray Application | The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco. |
| Airless Spray Plural Component | <p>Due to the fast reactivity of this coating system, this product should be applied via heated plural component spray systems only.</p> <p>Tip Size: 0.025 – 0.029 reversible type</p> <p>Part A Fluid Line: 1/2 in ID</p> <p>Part B Fluid Line: 3/8 in ID</p> <p>Spray Line: 1/2 in ID x 50 feet maximum</p> <p>Whip: 1/4 in ID</p> <p>Whip Length: 10 feet maximum</p> <p>Pump Size: 56:1 or greater</p> <p>Output: 4,000 - 6,000 psi, filter removed</p> <p>Static Mixer: 1/2 in ID x 12 in behind mixing valve</p> <p>Part A Resin: 135°F – 140°F (57°C – 60°C)</p> <p>Part B Hardener: 90°F – 95°F (32°C – 35°C)</p> |
| Touch-ups & Girth Weld Repairs | Manually mixed material should be brushed, rolled, or trowel applied within the specified pot life of the mix. |
| Brush | Medium bristle brush |
| Roller | Short-nap synthetic roller cover with phenolic core |
| Trowel | Flexible plastic trowel or grout float |



CURE SCHEDULE & RECOAT WINDOW

| TEMPERATURE | MINIMUM RECOAT | MAXIMUM RECOAT | RETURN TO SERVICE (HYDROCARBON IMMERSION) |
|--|----------------|----------------|---|
| 50°F (10°C) | 1 hour | 24 hours | 24 hours |
| 77°F (25°C) | 30 minutes | 2 hours | 4 hours |
| 95°F (35°C) | 15 minutes | 45 minutes | 3 hours |
| Dry-to-touch: 1.5 hours at 77°F (25°C) | | | |

Return-to-service varies with cargo. Consult ErgonArmor Technical Service for guidance.

SAFETY

Safety

Mixes and applications of this product present a number of hazards. Read and follow the hazard information, precautions and first aid directions on the individual product labels and safety data sheets before using.

Ventilation

Provide thorough air circulation during and after application until the material has cured when used in enclosed areas.

ESTIMATING & PACKAGING

Theoretical Coverage

80 square feet per gallon at 20 mils
40 square feet per gallon at 40 mils
Allow for loss in mixing and application

Package Sizes

Putty, 6 oz (170 g) 2-part Bag Kit
Item #: M-R3470-170G-01

Putty, 4 x 0.24 gal (0.9 L) Kit Case
Each 0.24 gal (0.9 L) Kit includes
- Part A Resin Beige, 0.18 gal (0.7 L) Jar
- Part B Hardener Black, 0.06 gal (0.2 L) Jar
- Mixing knife, chip brush, and spreader
Item #: M-R3470-QTCS-01

Putty, 20 gal (75.6 L) Kit
- Part A Resin Beige, 3 x 5 gal (19 L) Pails
- Part B Hardener Black, 5 gal (19 L) Pail
Item #: M-R3470-20GLKT-01

Putty, 100 gal (397 L) Kit
- Part A Resin Beige, 25 gal (95 L) Drum
- Part A Resin Beige, 50 gal (189 L) Drum
- Part B Hardener Black, 25 gal (95 L) Drum
Item #: M-R3470-100GLKT-01

Putty, 200 gal (757 L)
- Part A Resin Beige, 3 x 50 gal (189 L) Drums
- Part B Hardener Black, 50 gal (189 L) Drum
Item #: M-R3470-200GLKT-01

Storage & Shelf Life

Maintain product in original packaging and sealed until ready for use. Estimated shelf life is 12 months when stored in a dry area at 75°F (24°C). Actual shelf life may vary with storage conditions. Do not store below 40°F (4°C) or above 110°F (43°C).

If there is any question with respect to the quality of the components, check reactivity prior to use. Consult ErgonArmor Technical Service for assistance.

TYPICAL PHYSICAL PROPERTIES

| TEST METHOD | SYSTEM | RESULTS |
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| Compressive strength, 5 days ambient temperature ASTM C109 | | 12,000 – 15,000 psi |
| Wet adhesion ASTM D4541 Wet 5 days 158°F (70°C) water | Blasted steel 1 coat | >2,500 psi |
| Dry adhesion ASTM D4541 | Blasted steel 1 coat | >2,700 psi |
| Abrasion resistance ASTM D4060 | 1000 cycles, CS17 wheel 1000 gm load | 0.59 mils loss of DFT 1,750 cycles per mil |
| Impact resistance ASTM G14-88 | | 70 – 80 in-lbs |
| Cathodic disbondment CSA Z245.20-06 | 28 days at 185°F (85°C) | 4.9 mm disbondment |
| Cathodic disbondment CSA Z245.20-06 | 28 days at 77°F (25°C) | 1.1 mm disbondment |
| Dielectric strength (in paraffinic oil) ASTM D149 | Blasted steel 1 coat | 730 – 760 volts/mil |

TEMPERATURE RESISTANCE

| SERVICE | MAXIMUM TEMPERATURE |
|-------------------|---------------------|
| Dry, continuous | 300°F (149°C) |
| Dry, intermittent | 350°F (177°C) |
| Under insulation | 300°F (149°C) |

Temperature limitations will vary with cargo. Consult ErgonArmor Technical Service for guidance.

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

Rev 07/2020

TERMS AND CONDITIONS OF SALE

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