



SELECTION & SPECIFICATION DATA

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| Type | Ceramic-filled Novolac Epoxy |
| Description | Novocoat EP3800 Ceramic Carbide SC is a high-performance, ceramic-filled novolac epoxy repair/wear compound for highly abrasive service. Novocoat EP3800 Ceramic Carbide is available in SC grade with longer working life and FC grade with faster cure. |
| Features | <ul style="list-style-type: none"> • No VOCs • Outstanding abrasion resistance • Application and cure at room temperature • No shrinkage, expansion or distortion • Quick return-to-service |
| Uses | <ul style="list-style-type: none"> • Metal repair • Coal chutes and silos • Rock crushers • Dry bag houses • Ball mills • Non-skid |
| Color | Blue |
| Finish | Matte |
| 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> |
| Weld Repair | Use a flame to sweat out oil from deeply impregnated surfaces. Stabilize cracks by drilling the extremities. Long cracks should be drilled, tapped and bolted every few inches. Vee-out all cracks using a file. Degrease using clean rags. |

MIXING & THINNING

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| Ratio | 1A:1B by volume |
| Mixing | Mix equal parts of the resin and hardener thoroughly until color of material is uniform and free of streaks. |
| Thinning | Do not thin. |
| Pot Life | 25 minutes at 77°F (25°C) |
| | Pot life is shorter at higher temperatures. A larger volume of mixed material will have a shorter pot life than a smaller volume. |
| Cleanup | MEK or Acetone |

APPLICATION GUIDANCE

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| Conditions | Substrate surface temperature 50°F – 140°F (10°C – 60°C) and at least 5°F (3°C) above the dew point and rising. If surface temperature is above 140°F (60°C), consult ErgonArmor Technical Service for guidance. |
| Application | Apply directly onto the prepared surface with the spreader or mixing knife provided. Press down firmly to remove entrapped air, fill all cracks, and ensure maximum contact with the surface. Use reinforcement cloth over holes and cracks. |
| Brush & Roller | Brush or roller can be used to smooth uncured surface with solvent if desired. |

CURE SCHEDULE & RECOAT WINDOW

| SUBSTRATE TEMPERATURE | WORKING TIME | DRY-TO-TOUCH | MAXIMUM RECOAT | TIME TO 80 SHORE D HARDNESS |
|-----------------------|--------------|--------------|----------------|-----------------------------|
| 41°F (5°C) | 1 hour | 3 hours | 7 days | 33 hours |
| 50°F (10°C) | 30 min | 2.5 hours | 48 hours | 24 hours |
| 77°F (25°C) | 25 min | 50 min | 24 hours | 6.5 hours |

SAFETY

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| 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. |

PACKAGING, ESTIMATING & HANDLING

| ITEM # | PRODUCT | PACKAGING |
|-----------------------------|--|------------------------|
| M-EP3850-6LBKT-01 | Novocoat EP3800 Ceramic Carbide SC, Blue | 6 lbs (2.7 kg) Kit |
| | - Part A Resin, Light Gray | 3 lb (1.36 kg) Pail |
| | - Part B Hardener, Blue | 3 lb (1.36 kg) Pail |
| M-EP3850-25LBKT-01 | Novocoat EP3800 Ceramic Carbide SC, Blue | 25 lb (11.4 kg) Kit |
| | - Part A Resin, Light Gray | 11.8 lb (5.35 kg) Pail |
| | - Part B Hardener, Blue | 13.2 lb (6.00 kg) Pail |
| Theoretical Coverage | 9.16 square feet per 25 lb kit at 250 mil 2.20 square feet per 6 lb kit at 250 mil Allow for loss in mixing and application. | |



Storage & Shelf Life

Maintain products in original packaging and sealed until ready for use. Estimated shelf life is 24 months for part A and 12 months for part B 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. For assistance consult with ErgonArmor.

TYPICAL PHYSICAL PROPERTIES

| PROPERTY | VALUE |
|---|---|
| Dry adhesion ASTM D4541 Blasted steel 1 coat | >2,800 psi (19 MPa) |
| Flash point ASTM D1310 | >200°F (93°C) |
| Taber abrasion ASTM D4060 1000 cycles, H-22 wheels, 1 kg load | 80 mg loss 333 cycles per mil loss |
| Coefficient of thermal expansion | $1.1 \times 10^{-6}/^{\circ}\text{F}$ ($2.0 \times 10^{-6}/^{\circ}\text{C}$) |
| Thermal stability Weight loss after 48 hours at 300°F (149°C) | 0.0003 g |
| Specific gravity | Part A: 2.07 Part B: 2.25 |
| VOC | 0 lb/gal (0 g/L) |
| Density | 18.3 lb/gal (2.2 kg/L) |

SERVICE TEMPERATURE

| SERVICE | MAXIMUM TEMPERATURE |
|--------------|---------------------|
| Dry | 250°F (121°C) |
| Splash/spill | 200°F (93°C) |
| Immersion | 150°F (66°C) |

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

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TERMS AND CONDITIONS OF SALE

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