



SELECTION & SPECIFICATION DATA

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| Type | Ceramic-filled Novolac Epoxy |
| Description | Novocoat EP3800 Ceramic Carbide FC is a high-performance ceramic-filled novolac epoxy repair/wear compound for highly abrasive service. |
| 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 |
| Color | Red |
| 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-SP10 Near White Metal Blast with angular profile of 2.5 – 3.5 mils.</p> <p>Non-immersion: SSPC-SP6 Commercial Blast with angular profile of 1.5 – 3.0 mils, SSPC-SP2 Hand Tool or SSPC-SP3 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. |
| Substrate Temperature | 50°F – 140°F (10°C – 60°C) <90% relative humidity If > 140°F (60°C), consult ErgonArmor Technical Service. |

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. |

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| Pot Life | 5 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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| Application | Apply directly onto the prepared surface with the plastic applicator or spatula 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 | WORKING TIME | DRY-TO-TOUCH | MAXIMUM RECOAT | TIME TO 80 SHORE D HARDNESS |
|-------------|--------------|--------------|----------------|-----------------------------|
| 41°F (5°C) | Not workable | 40 min | 24 hours | 4 hours |
| 50°F (10°C) | 10 min | 30 min | 12 hours | 3 hours 15 min |
| 77°F (25°C) | 8 min | 20 min | 2 hours | 1 hour 40 min |

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. |

ESTIMATING & PACKAGING

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| Theoretical Coverage | 2.1 square feet per 6 lb unit at 250 mils 8.7 square feet per 25 lb unit at 250 mils Allow for loss in mixing and application. |
| Package Sizes | <p>Red, 6 lbs (2.7 kg) Kit</p> <ul style="list-style-type: none"> - Part A Resin Light Gray, 3 lbs (1.4 kg) Pail - Part B Hardener Red, 3 lbs (1.4 kg) Pail <p>Item #: M-EP3840-6LBKT-01</p> <p>Red, 25 lbs (11.4 kg) Kit</p> <ul style="list-style-type: none"> - Part A Resin Light Gray, 11.8 lbs (5.35 kg) Pail - Part B Hardener Red, 13.2 lbs (6 kg) Pail <p>Item #: M-EP3840-25LBKT-01</p> |



TYPICAL PHYSICAL PROPERTIES

| TEST METHOD | RESULTS |
|---|---------------------------------------|
| Dry adhesion ASTM D4541 Blasted steel 1 coat | >2,800 psi |
| Flash point ASTM D1310 | >200°F (93.5°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 x 10 ⁻⁶ /°F |
| 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 g/l |
| Density | 18.32 lbs/gal |

SERVICE TEMPERATURE

| SERVICE | MAXIMUM TEMPERATURE |
|--------------|---------------------|
| Dry | 250°F (121°C) |
| Splash/spill | 200°F (93°C) |
| Immersion* | 150°F (65°C) |

*Immersion with solvents, mineral acids, or alkalis, or if over 150°F (66°C), consult ErgonArmor Technical Service.

STORAGE & SHELF LIFE

Shelf Life Part A: 24 months at 75°F (24°C)
Part B: 12 months at 75°F (24°C)
When stored under recommended conditions.

Storage Conditions 40°F – 110°F (4°C – 43°C)
0 – 100% relative humidity

Store in a dry area out of direct sunlight. Maintain product in original packaging and sealed until ready for use.

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