Novocoat™ EP5700 Ceramic Paste

SELECTION & SPECIFICATION DATA

Type
Novolac Epoxy Ceramic Paste

Description
Novocoat EP5700 Ceramic Paste is a two-component 100% solids trowel-grade novolac epoxy polymeric repair paste used to fill voids and rebuild worn metal surfaces in pumps, motors, impellers, fans, tube sheets, heat exchangers, elbows, nozzles and more.

Features
- 100% solids, no VOCs
- Excellent chemical resistance
- Maximum heat resistance

Uses
- Coal chutes and silos
- Dry bag houses
- Slurry tanks
- Heat exchanger internals
- Pumps
- Motors, impellers, fans, elbows, nozzles

Color
Dark gray

Solids Content
99 - 100% by volume

SUBSTRATES & SURFACE PREPARATION

All
Substrate must be clean, dry and free of contaminants.

Steel
Immersion: SSPC-SP 10/NACE 2 Near White Metal Blast with angular profile of 2.5 – 3.5 mils.

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.

Self-priming on steel.

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

Mixing
Do not mix partial kits. For small kits, transfer the entire contents of the Resin and Hardener onto the plastic mix board. For large kits, completely empty the hardener container into the resin container, scraping it clean. Mix together thoroughly until color of material is uniform and free of streaks.

Thinning
Do not thin.

Pot Life
40 minutes at 75°F (24°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 GUIDELINES

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 Armor 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 tape over holes and cracks.

Brush & Roller
Brush or roller can be used to smooth uncured surface with solvent if desired.

CURE SCHEDULE & RECOAT WINDOW

Recoat window	1 – 1.5 hours at 70°F (21°C)
Light loading	12 hours at 70°F (21°C)
Full or chemical service	7 days at 70°F (21°C)

Return-to-service will vary with temperature during cure and chemical exposure. Consult Armor Technical Service for guidance.

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PACKAGING, ESTIMATING & HANDLING

ITEM#	PRODUCT	PACKAGING
M-EP5720-QTCS-01	Novocoat EP5700 Ceramic Paste, Dark Gray Case includes 1 mixing board. Each kit includes: - Part A Resin, Dark Gray - Part B Hardener - Mixing knife, spreader	4 x 2.2-lb (1 kg) Kits 1.8 lb (0.8 kg) Jar 0.37 lb (0.2 kg) Jar
M-EP5720-1GLKT-01	Novocoat EP5700 Ceramic Paste, Dark Gray - Part A Resin, Dark Gray - Part B Hardener	11 lb (5 kg) Kit 9.2 lb (4.2 kg) Jar 1.9 lb (0.8 kg) Jar

Theoretical Coverage

12.8 square feet per gallon at 125 mils
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 Armor.

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.

TYPICAL PHYSICAL PROPERTIES

PROPERTY	VALUE
Pull-off adhesion test ASTM D4541	>2800 psi (19 MPa)
Flash point	>250°F (121°C)
Taber abrasion ASTM D4060 1000 cycles, H-22 wheels dry, 1 kg load	495 mg loss 29.1 mils loss 34.8 cycles per mil loss
Coefficient of thermal expansion	1.8 x 10^{-6}/°F (3.2 x 10^{-6}/°C)
Specific gravity	Resin: 1.51 Hardener: 0.95
VOC	0 lb/gal (0 g/L)
Density	11.4 lb/gal (1.4 kg/L)

SERVICE TEMPERATURE

SERVICE	MAXIMUM TEMPERATURE
Dry	450°F (232°C)
Splash/spill	Up to 360°F (182°C)
Immersion	Up to 300°F (149°C)

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

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