

Technical Bulletin # 1015E

Product Description

ITW Philadelphia Resins REPAIR COMPOUND is a two component epoxy paste developed specifically for filling, smoothing and fairing applications on metals, plastics (FRP), wood or masonry. The smooth consistency and excellent non-sagging properties of REPAIR COMPOUND make it unexcelled for leveling rough or pitted plating, forming fillets, smoothing weld seams, etc. REPAIR COMPOUND is nontoxic and contains no solvents. Resistance to fresh water, salt water, crude and refined oils, gasoline, jet fuel, etc., is excellent.

Use & Benefits

REPAIR COMPOUND is ideal for repairing and preparing surfaces of hulls, storage tanks, sonar domes, etc., for painting, fiberglassing or rubber lining where all welds, pitting, rough surfaces or irregularities are required to be smoothed. The use of REPAIR COMPOUND provides a tough, uniform surface that will readily accept any top coating or lining.

Its exceptional troweling and application characteristics provide a smooth finished surface. If additional finishing is desirable, the cured epoxy is readily sanded or ground. The excellent feathering properties facilitate achieving a precision surface profile or smoothness.

Pump casings, impellers, sea chests, condenser boxes, etc., are easily and effectively repaired with REPAIR COMPOUND. Additional uses include the fairing of corroded or uneven hull and deck plating, repair of cavitation damage, repair and sealing of riveted seams, etc. REPAIR COMPOUND is ideally suited for fairing around sensitive electrical equipment, as it contains no metallic fillers.

Surface Preparations

The adhesion of REPAIR COMPOUND is greatly improved by removing all grease, rust, scale and paint from surface before application. Sand-blasting of metal surfaces to SSPC #10 Near White is the preferred preparation, but sanding, grinding or hand chipping are acceptable for small areas. Un-coated fiberglass or wood requires grinding or sanding to roughen and clean surface. Compound may be used for fairing over sound old coatings if surface is lightly abraded by sanding to maximize adhesion.

Remove all grease and oil films by thoroughly cleaning surface with clean rags saturated with TriChloroEthylene, Xylene or IMPAX IXT-59 Solvent.

Application Instructions

Place equal quantities by volume of blue resin and white hardener on small palette or mortarboard with putty knife. Thoroughly mix the equal quantities together until a uniform streak-free blue color is achieved. A complete inter-mixing of the two components is essential for proper curing.

Working time of mixed material is one hour at 72°F (22°C), longer at lower temperatures, shorter at higher temperatures.

REPAIR COMPOUND will hard cure and is readily overcoated, ground or sanded in 6 hours at 70°F (21°C). Up to 8 hours may be required at 50°F (10°C). Hand or tool dampened with water aids in smoothing. Clean tools and equipment with epoxy solvent or IMPAX IXT-59 Solvent.

Physical Properties

COMPRESSIVE STRENGTH	8,900 psi (623 kg/cm ²)	ASTM D-695
TENSILE STRENGTH	2,600 psi (183 kg/cm ²)	ASTM D-638
HARDNESS	65-70 Shore D after 8 hours @ 72°F (22°C)	ASTM 4-2240
	80-85 Shore D after 24 hours @ 72°F (22°C)	
IZOD IMPACT STRENGTH	5.3 in.lb./in (0.24 Newton meters/cm)	ASTM D-258
SERVICE TEMPERATURE	180 °F (82 °C)	
SPECIFIC GRAVITY	1.45	

Product Information

COLOR	Resin – Blue Hardener – Cream Mixed - Blue
MIX RATIO	1 : 1 By Volume
UNIT COVERAGE	6.8 Liters (415 in ³)
APPLICATION TEMPERATURE	Above 13°C (55°F)
CURE TIME (approximate)	Sandable: 3 hours @ 72°F (22°C) Hard Cure: 8 hours @ 72°F (22°C) Full Cure: 24 hours @ 72°F (22°C)
POT LIFE	70 min. @ 72°F (22°C)
CLEAN UP	IMPAX IXT-59 Epoxy Solvent
UNIT PACKAGING	Resin (NH): 3.2 L (0.84 gal) in a 1 gal can Hardener (NH): 3.6 L (0.94 gal) in a 1 gal can
UNIT WEIGHT	Resin: 4.6 kg (10.2 lbs) Hardener: 5.5 kg (12.2 lbs)
SHIPPING WEIGHT	11.3 kg (25 lbs)
SHELF LIFE	18 months in closed container stored @ 50°F to 90°F (10°C to 32°C)

Date 03/2012

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