MARINE EPOXY SYSTEMS

ITW Polymer Technologies

Super Ceramic Repair Putty

Technical Bulletin # 821G

Product Description

SUPER CERAMIC Repair Putty is a smooth ceramic-filled epoxy putty with exceptional wear resistance. The "no-slump" nature of SUPER CERAMIC Repair Putty makes it ideal for repairing overhead, vertical or curved surfaces.

Use & Benefits

SUPER CERAMIC Repair Putty is well suited for the repair of "severe service" pump equipment commonly found in industries, such as pulp and paper mills, chemical processing, refineries, marine and coal mining operations as well as many others.

Surface Preparations

The repair area should be free of all grease, dirt and oxidation. The surface should be sandblasted to "near white" metal using an 8 to 40 mesh grit. Grinding is suitable for small areas or when other methods are prohibited. The entire area should then be washed down with IMPAX IXT-59 Safety Solvent.

NOTE: Be careful not to touch the repair area with bare hands after solvent washing. SUPER CERAMIC Repair Putty should be applied as soon as possible after blasting to prevent oxidation.

Application Instructions

SUPER CERAMIC Repair Putty's consistency was designed to provide a stiff mix to insure its "no-slump" capabilities when applied to overhead, vertical or curved surfaces.

Place 7 parts resin and 1 part hardener by weight or 4.3 parts resin and 1 part hardener by volume on a clean, flat surface and mix thoroughly with a trowel or wide blade tool. Material should have a streak-free gray color.

NOTE: Do not mix more than 4 minutes or "no-slump" properties may diminish. Do NOT power mix.

When repairing a pump casing, the entire housing should have approximately 3mm (1/8") of SUPER CERAMIC Repair Putty applied to it. Be sure to allow adequate clearance between housing and impeller. If it is not possible to coat the entire housing, do not feather edge the SUPER CERAMIC. Instead, square off the repair area to leave at least a 3mm (1/8") application of SUPER CERAMIC Repair Putty at the edge of the damaged area.

NOTE: Do not mix more material than can be applied in 20 minutes.

Top coating SUPER CERAMIC Repair Putty with additional layers must be accomplished prior to the first layer taking a hard set -- 4 hrs. @ 22°C (72°F). Once SUPER CERAMIC Repair Putty hardens, the surface must be brush blasted or abraded to insure inter-layer bonding of subsequent layers.

ITW POLYMER TECHNOLOGIES
130 Commerce Drive • Montgomeryville, PA 18936
Phone 215-855-8450 • Fax 215-855-4688 • www.chockfast.com

Physical Properties

COMPRESSIVE STRENGTH	877.5 kp/cm^2 (12,700 psi)	ASTM D-695
COEFFICIENT OF LINEAR THERMAL EXPANSION	44.6 X 10^{-6}/°C 24.8 X 10^{-6}/°F	ASTM D-698
TENSILE SHEAR STRENGTH	125.4 kp/cm2 (1,800 psi)	ASTM D-1002
HARDNESS	Shore D = 90	ASTM D-1706
IZOD IMPACT STRENGTH	0.28 foot pounds/inch notch	ASTM D-256
SERVICE TEMPERATURE	-73°C to 260°C (-100°F to 500°F)	

Product Information

COLOR	Resin – Gray, Hardener – White Gray after mixing
MIX RATIO	7 to 1 by weight 4.3 to 1 by volume
COVERAGE	280 cc (17 cu.in.)
APPLICATION TEMPERATURE	13°C (55°F) to 35°C (95°F)
CURE TIME (approximate)	24 hours @ 22°C (72°F)
POT LIFE	20 minutes @ 22°C (72°F)
CLEAN UP	IMPAX IXT-59 Solvent or similar
APPLICATION TEMPERATURE	13°C (55°F) to 35°C (95°F)
UNIT PACKAGING	Resin (NH): 227 cc (7.7 oz) in a 12 oz plastic jar Hardener (NH): 53 cc (1.8 oz) in a 4 oz plastic jar
UNIT WEIGHT (1 lb kit)	Resin: 405 g (0.89 lbs) Hardener: 60 g (0.13 lbs)

Reference

For detailed information on the repair of eroded Kort nozzles, refer to SUPER PRODUCTS Repair Procedure #831. For detailed information on other repairs, contact ITW Polymer Technologies.

Date

10/2005