



SUPER CERAMIC REPAIR LIQUID – EPOXY REPAIR LIQUID TECHNICAL DATA SHEET #819

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VERSION: G

PRODUCT DESCRIPTION

SUPER CERAMIC Repair Liquid is a unique ceramic filled, high build, brush able epoxy coating. Formulated for unequaled chemical and corrosion resistance with outstanding wear properties under adverse environments.

USE & BENEFITS

SUPER CERAMIC Repair Liquid is ideally suited for lining and resurfacing all types of severe service equipment commonly found in chemical plants, power plants, pulp & paper mills, mining operations, water treatment plants and a variety of other industrial and marine applications.

DESIGN CONSIDERATIONS

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 size. Grinding is suitable for small areas or when other methods are prohibited. The entire area should then be washed down with IMPAX IXT-59 Solvent.

NOTE: Be careful not to touch the repair area with your bare hands after solvent washing. Unit should be repaired as soon as possible after blasting to prevent oxidation.

APPLICATION INSTRUCTIONS

Please refer to the appropriate safety data sheet (SDS) prior to using this product.

Place 5 parts resin (by volume) and 1 part hardener in a clean, smooth sided container and mix thoroughly. Material should have a streak-free dark orange color. Do not mix

more than five minutes.

DO NOT mix more material than can be applied in 15 minutes.

SUPER CERAMIC Repair Liquid may then be applied with a stiff, short bristle brush or plastic squeegee. Apply a thin coat, wetting out the application surface to fill all pitted areas and sealing the metal surfaces against corrosion. When lining new equipment, the entire interior housing should have approximately 1.5 mm (1/16") of ceramic liquid. Be certain to maintain proper clearances between housing and impeller. This preventative maintenance procedure will greatly extend the longevity of severe service equipment as well as reducing costs due to downtime.

NOTE: When applying more than one coat add the black tube of additive to the second coat to obtain a dark brown color. This will help differentiate between the coats. Top coating SUPER CERAMIC Repair Liquid with additional layers must be accomplished prior to the first layer taking a hard set - 2 hrs. @ 72°F (22°C). Once SUPER CERAMIC Repair Liquid hardens, the surface must be brush blasted or abraded to insure inter-layer bonding.

SUPER CERAMIC Repair Liquid was specifically designed for use with SUPER CERAMIC Repair Putty for restoring original equipment dimensions to severely damaged units. Refer to Bulletin #821.

STORAGE RECOMMENDATIONS

All product components should be stored in a dry, shaded area in original unopened containers and within a temperature range of 65°- 95°F (16° - 35°C). For additional information, please refer to Technical Guide 1024.

PHYSICAL PROPERTIES

COMPRESSIVE STRENGTH	17,300 psi (119.3 MPa)	ASTM D695 MOD*
FLEXURAL STRENGTH	8,000 psi (55.2 MPa)	ASTM D790
ADHESIVE TENSILE SHEAR STRENGTH	3125 psi (21.5 MPa)	ASTM D1002
HARDNESS - SHORE D	90	
RECOMMENDED SERVICE TEMPERATURE	-100°F to 500°F (-73°C to 260°C)	

The data shown reflect typical results based on laboratory testing under controlled conditions. Variations from the above data are typical for field-prepared samples.

**Cured 24 hours at room temperature, post-cured 4 hours, and conditioned 4 hours at room temperature before evaluation.*

PRODUCT INFORMATION

UNIT COVERAGE	18 in ³ (295 cm ³)	
TYPICAL APPLICATION TEMPERATURES	55°F to 95°F (13°C to 35°C)	
INITIAL CURE TIME (APPROXIMATE, BASED ON CONTACT SURFACE TEMPERATURES)	72°F (22°C):	24 hours
MIXING RATIO	BY WEIGHT: 10 TO 1 BY VOLUME: 5 TO 1	
POT LIFE (APPROXIMATE)	72°F (22°C):	15 mins.
PACKAGING PER UNIT	RESIN (A): 9 oz (265 mL) in a 12 oz plastic jar HARDENER (B): 1.3 oz (38 mL) in a 4 oz plastic jar	
COMPONENT WEIGHTS	RESIN (A): 0.92 lbs (417 grams) HARDENER (B): 0.10 lbs. (44 grams)	
UNIT SHIPPING WEIGHT	18 lbs. (8.2 kg) /case, 10 kits/case	
COLOR	RESIN (A):	ORANGE
	HARDENER (B):	BLACK
	MIXED (A + B):	DARK ORANGE
CLEAN UP	IMPAX IXT-59 Solvent or equal	
SHELF LIFE	2 years in dry storage	
CHEMICAL RESISTANCE	Excellent against acids, bleach, and petroleum products. Refer to Technical Guide 675 for full list.	

REFERENCE

For any additional recommendations or applications beyond the typical ones listed in this document, please contact your local representative of our Worldwide Distributor Network or ITW Performance Polymers for further support.

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