



# Datasheet

## Epoxy Adhesive

RS Stock No: 691145

A high performance, high density, ceramic filled, brushable epoxy to seal and protect new or repaired surfaces from cavitation, erosion and wear.

### FEATURES

- Low viscosity achieves 100% contact with prepared surfaces
- Ideal for rebuilding worn areas less than 2mm deep
- Easily applied using a short bristle brush
- Excellent chemical resistance
- Temperature resistance to 177°C

### RECOMMENDED APPLICATIONS

- Seal and protect new equipment exposed to erosion and corrosion
- Protect pump casings, impeller blades, gate valves, water boxes and fan blades
- Rebuild heat exchangers, tube sheets and other circulation water equipment
- Use it as a top coat on repaired surfaces to provide an exceptionally smooth surface

### PRODUCT DATA

#### Typical Properties

Mixed Viscosity.....	40,000 cps
Volume Solids.....	100%
Cured Density.....	1.69 gm/cc
Pot Life @ 21 <sup>o</sup> C.....	21 minutes
Compressive Strength ASTM D695.....	105N/mm <sup>2</sup>
Adhesive Tensile Shear ASTM D1002.....	147N/mm <sup>2</sup>
Cured Hardness Shore D ASTM D2240.....	87D
Dielectric Strength, volts/mil, ASTM D149.....	382
Coverage.....	.1190cm <sup>2</sup> @.5mm per 1Kg
Typical Brush Coat Thickness.....	.3mm --- .75mm

#### Chemical Resistance 7 days room temperature cure (30 days immersion @ 21°C)

5% Bleach (Sodium Hypochlorite)	Excellent	10% Phosphoric Acid	Fair
5% Trisodium Phosphate	Excellent	4% Phosphoric Acid	Very Good
10% Sulphuric Acid	Excellent	10% Sodium Hydroxide	Excellent
50% Sulphuric Acid	Excellent	50% Sodium Hydroxide	Excellent
10% Hydrochloric Acid	Excellent	5% Alum (Aluminium Sulphate)	Excellent
10% Nitric Acid	Very Good	Ferric Chloride	Excellent
40% Nitric Acid	Unsatisfactory	10% Acetic Acid	Unsatisfactory

PLEASE CONSULT FACTORY FOR OTHER CHEMICALS

Epoxies are very good in water, saturated salt solution, leaded gasoline, mineral spirits, ASTM#3 oil and propylene glycol. Epoxies are generally not recommended for long term exposure to concentrated acids and organic solvents



**APPLICATION INFORMATION**

**Surface Preparation**

Proper surface preparation is essential to a successful application. The following procedure should be considered.

- . All surfaces must be roughened, ideally by grit blasting (3-16 mesh/cm grit size) or by grinding with a coarse wheel or disc. This creates increased surface area and "edges" to lock into, and essential for successful application
- . Metal that has been handling sea water or other salt solutions should be grit and high pressure water blasted and left overnight to allow any salts in the metal to "sweat to the surface. Repeat blasting. Repeat process if necessary. A test for chloride contamination should be performed prior to application.
- . All abrasive preparation should be preceded and followed by chemical cleaning with Cleaner Conditioner (Stock 19500) to remove all traces of oil, grease, dust or other foreign substances
- . Heating the repair area to 37° C - 40° C immediately before applying Brushable Ceramic is recommended. This procedure dries off any moisture, contamination or solvents and assists the Ceramic System in achieving maximum adhesion to the substrate

**MIXING**

Brushable Ceramic is formulated to brush easily onto prepared surfaces with a short bristle brush. Add hardener to resin. Mix thoroughly with a spatula until the consistency is uniform, about 4 minutes. Be sure to mix material from the bottom and sides of container. It is strongly recommended that full container units be mixed. If mixing less than full contents, use the following mix ratios:

Mix ratio by weight: 9.8 parts resin to 1 part hardener

Mix ratio by volume: 6.0 parts resin to 1 part hardener

**APPLICATION**

For best results, product should be kept and applied at room temperature. Brushable Ceramic can be applied when temperatures are between 15° C and 32° C. When temperatures are below 21° C, cure and pot life will be longer, and above room temperature, cure and pot life will be shorter.

**CURE**

Working time is 21 minutes at 21° C. Brushable Ceramic will achieve a tack-free finish approximately 2-3 hours after applying. Functional cure is achieved in about 24 hours at 21° C. Cure may be accelerated by using heat after the coating has been allowed to harden under ambient conditions. Material will fully cure at 65° C for 4 hours.

**PRECAUTION**

For complete safety and handling information, please refer to Material Safety Data Sheets **PRIOR** to using this product.

**For technical assistance please call 0800 626727**

**ORDERING INFORMATION**

<u>Stock No</u>	<u>Unit Size</u>
11762	500g
11761	1 Kg