# BRUSHABLE CERAMIC RED/BLUE

### PRODUCT INFORMATION

| Stock No. | Package Size |
|-----------|--------------|
| 11752     | Red 500g     |
| 11762     | Blue 500g    |

# Description

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

# 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 topcoat on repaired surfaces to provide an exceptionally smooth surface

#### **PRODUCT DATA**

Typical Physical Properties

Colour Red or Blue Mix Ratio by Volume 3.4:1 Mix Ratio by Weight 5.6:1 % Solids by Volume 100 Pot life at 25°C/ mins 40 Specific Volume CC/Kg 633 Cured Shrinkage cm/cm 0.002 Density g/cm<sup>3</sup> 1.58

Temperature resistance / °C Wet 65°C Dry 175°C Coverage 0.633m²/Kg @ 1mm

Cured Hardness / Shore D 90
Dielectric Strength KV/mm 15
Adhesive Tensile Shear / MPa 13.75
Compressive Strength MPa 105
Coefficient of Thermal Expansion x10<sup>-6</sup> 34

cm/cm/°C

Thickness per Coat / mm 0.25-1.0 Functional Cure Time /Hours @ 22°C 24 Recoat Time /Hours @ 22°C 4-6 Mixed Viscosity /cps (where applicable) 32000

Chemical Resistance 7 days room temperature cure (30 days) - Testing carried out 30 days immersion at 24 °C

Very Good Methylene Chloride Ammonia Poor **Cutting Oil** Excellent Sodium Hypochlorite 5% (Bleach) Very Good Sodium Hydroxide 10% Excellent Ethyl Alcohol Excellent Gasoline (Unleaded) Excellent Sulphuric Acid 10% Excellent Hydrochloric Acid 10% Excellent Xylene Fair Methyl ethyl Ketone (MEK) Poor

Excellent = +/- 1% weight change Very Good = +/- 1-10% weight change Fair = +/- 10-20% weight change Poor = > 20% weight change



**Brushable Ceramic Red/Blue** 

## **APPLICATION INFORMATION**

Cure

Working time is 40 minutes at 22°C. Brushable Ceramic will achieve a tack-free finish approximately 2-3 hours after applying. Functional cure is achieved in about 24 hours at 22°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 in 4 hours. Final coating thickness will be dependent on application. At least two coats are recommended to insure a pinhole free coating.

Surface Preparation Proper surface preparation is essential to a successful application. The following procedures should be considered:

- · All surfaces must be dry, clean and rough.
- If surface is oily or greasy, use MEK, Acetone, IPA or similar to degrease the surface.
- 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 blasted and high pressure water blasted and left overnight to allow any salts in the metal to 'sweat' to the surface. Repeat blasting may be required to 'sweat out' all the soluble salts. A test for chloride contamination should be performed prior to any epoxy application. The maximum soluble salts left on the substrate should be no more than 40 p.p.m. (parts per million).
- Chemical cleaning with MEK, Acetone, IPA or similar should follow all abrasive preparation.
  This will help to remove all traces of sandblasting, grit, oil, grease, dust or other foreign
  substances.
- Heating the repair area to 30°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 and mix thoroughly with a spatula or similar tool until a uniform, streak-free consistency is obtained, this should take 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

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 30°C. When temperatures are below 22°C, cure and pot life will be longer, and above room temperature cure and pot life will be shorter.

Shelf life & Storage

A shelf life of 3 years from date of manufacture can be expected when stored at room temperature (22°C) in their original containers

Precaution

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

Warranty

ITW Devcon will replace any material found to be defective. As the storage, handling and application of this material is beyond our control we can accept no liability for the results obtained.

Disclaimer

All information on this data sheet is based on laboratory testing and is not intended for design purposes. ITW Devcon makes no representations or warranties of any kind concerning this data.

For product information visit <u>www.devconeurope.com</u> alternatively for technical assistance please call +353 61 771501 (Ireland) or +49 (0) 431 71791-0 (Germany)

