

## **Product Specification Sheet**

# DEP 201 Ceramic Metal

**DEP 201 Ceramic Metal** is a two component solvent free epoxy metal repair compound. The product has been designed for use on a wide range of metallic surfaces subject to abrasion and impact.

#### **Typical Applications**

Suitable for emergency repairs or part of planned maintenance to equipment such as worn impellers, damaged valves, eroded separator housings, damaged pump casings, eroded pipe work, propellers, bow thrusters, rudders, corroded water boxes and eroded end plates and tube sheets.

# Characteristics Appearance

Base: Dark Grey Paste
Activator: Light grey paste
Mixed: Mid grey paste

#### **Mixing Ratio**

By weight: 5:1 By volume: 3:1

#### Density

Base: 2.70 Activator: 1.70 Mixed: 2.46

#### **Volume Capacity**

406cc/Kg

#### Solids content

100%

#### Slump Resistance

Nil at 2.0 cm

#### **Useable Life**

10°C 50-60 minutes20°C 25-30 minutes30°C 15-20 minutes

#### Coverage

1Kg will cover 0.4 sq metres at a nominal thickness of 1mm.

#### **Cure Times**

Once hardened, material should be left for the following periods of time at 20°C before being subjected to the conditions indicated. These times will be doubled at 10°C and halved at 30°C.

Movement without load or immersion 1.5 hours

Machining and

light loading 2 hours

Full loading 2 days

Immersion 3 days

#### Storage life

5 years if unopened and stored in normal dry conditions (15-30°C)

### **Mechanical Properties**

#### **Abrasion Resistance**

Taber CS17 Wheels/1 Kg load 147mg loss/1000 cycles 0.06cc loss/1000 cycles

#### Adhesion

Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 75 micron profile 188kg/cm<sup>2</sup> 2675psi

#### Compressive strength

Tested to ASTM D 695

1089kg/ cm<sup>2</sup> 15,500psi **Corrosion Resistance** Tested to ASTM B117

Minimum 5000 hours

#### Flexural Strength

Tested to ASTM D790

703kg/cm<sup>2</sup> 10,000psi

#### **Hardness**

Rockwell R to ASTM D785

100

#### **Heat Distortion**

Tested to ASTM D648 at 264psi fibre stress.

20°C Cure 57°C 100°C Cure 98°C

#### **Heat Resistance**

Suitable for long term water immersion at temperatures up to 70°C and intermittent contact with pressurised steam up to 120°.

Resistant to dry heat in excess of 200°C dependent on load.

#### **Chemical Resistance**

The product resists attack by a wide variety of inorganic acids, alkalies, salts and organic media. Refer to the DE Polymers Limited Technical Centre for advice.

DE Polymers Limited Harrogate, North Yorkshire, HG2 8QG, United Kingdom Tel: +44 1423 888132 Email: info@depolymers.co.uk



# **Product Specification Sheet**

#### Quality

All DE Polymers Limited products are manufactured under the scope of a fully documented quality system.

#### Warranty

DE Polymers Limited warrants that the performance of the product supplied will conform to the typical descriptions quoted within this specification provided material is stored correctly and used according to the procedures detailed in the Technical Data Sheet for the material.

#### Health and safety

Please ensure good practice is observed at all times during the mixing and application of this product. Protective gloves and other recommended personal protective equipment must be worn during the mixing and application of this product. Before mixing and applying the material please ensure you have read and fully understood the detailed Material Safety Data Sheet

**Legal Notice:** The data contained within this Product Specification is furnished for information only and is believed to be reliable at the time of issue. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the responsibility of the customer to determine the products suitability for use. DE Polymers Limited accepts no liability arising out of the use of this information or the product described herein.

201150526

DE Polymers Limited Harrogate, North Yorkshire, HG2 8QG, United Kingdom Tel: +44 1423 888132 Email: info@depolymers.co.uk