

## CERAMETAL 2

TechnicalData: DIFFCOR/CR/06-18

### Product Description:

**Cerametal 2** is a solvent free, fluid grade poly ceramic coating and surfacing compound for fluid flow environments. Easily applied by brush, it is the finest material available for repairing and preventing erosion/corrosion damage caused by fluid flow and entrained solids, impingement and bimetallic action. Specially formulated to resist abrasive erosion, it is virtually non-machinable even with carbide tipped tools.

### Application:

Protecting exhausters from corrosion  
 Repairing heat exchangers & condensers.  
 Repairing butterfly valves

**Cerametal 2** is ideal for repair and preventing erosion/corrosion damage without heat to pumps, impellers, heat exchangers, valves, struts/rudders, tube sheets, water boxes, tanks, diffusers, piping.  
 Temperature range 20 °C to 150 °C.

<b>Technology</b>	Epoxy
Chemical Type	Epoxy
Appearance(Base)	Black
Appearance(Activator)	Off white
Appearance(Mixed)	Grey
Components	Two component-requires mixing
Mix Ratio, by volume Resin: Hardener	3:1
Mix Ratio, by weight Resin: Hardener	4:1
Cure	Room temperature cure
Application	Abrasion resistance

### TYPICAL PROPERTIES OF UNCURED MATERIAL

#### Base:

Viscosity: Paste  
 Weight per liter: 1.6 kg/liter

#### Hardener:

Viscosity: Paste  
 Weight per liter: 1.6 kg/liter

#### Mixed:

Viscosity: Paste  
 Coverage: 0.35 m<sup>2</sup> @ 1mm thick/1kg

### TYPICAL CURING PERFORMANCE

#### Curing Properties

Gel Time @ ambient temp minutes 20 to 30

#### Curing time vs. Temperature

Ambient temp	20°C	25°C	30°C
Pot life	50min	30min	20min
Full cure	18hrs	14hrs	12 hrs.

#### Typical cured properties of material

Compressive strength (ASTM D642) 14500-15500 Psi  
 Flexural strength (ASTM 790) 9000-9500 Psi  
 Hardness shore D (ASTM D2240) 82-85  
 Tensile strength (ASTM D882) 5000-5500 Psi  
 Elongation At break % (ASTM D882) 2.3  
 Shear strength (ASTM D1002) 2500-2800 Psi  
 On grit blasted MS surface

Abrasion resistance H-18 wheels 134mg  
 1000 cycles (ASTM D 4060)

**PROCEDURE:** A clean dry surface free of loose rust or scale is necessary. Abrasive blasting to “near white” is preferred for general use. For severe Immersion conditions or temperature exposure, blast to “white metal”.

DIFFPRIME can be used as priming material for excellent adhesion.

#### Mixing:

Mix “base and activator” in specified ration which is supplied in contrasting colors, on clean flat surface. Mix with spatula until a uniform blend free of streaks is obtained