CERAMETAL 3

TechnicalData: DIFFCOR/CR/06-18

Product Description

Cerametal 3 is a low friction corrosion resistant two component solvent-free lining compound specially designed to combat erosion/corrosion found in fluid flow environments. It is easily applied by brush or roller, keeping application cost to a minimum It is a 'resin rich' system that 'wets out' surfaces completely thus ensuring maximum adhesion. It is the most economical chemical and corrosion resistant coating system for the most aggressive industrial environments. It exhibits excellent adhesion to concrete as well as metal surface.

Application:

1) Pumps casing and impellers for efficiency improvement and power saving

2) Heat exchanger, valves, struts/Rudders, tube sheets, water boxes, tanks

Cerametal 3 is ideal for compound to combat erosion/corrosion in heat exchangers, tube sheets, water boxes, pumps, pipes, valves, impellers, concrete floors etc. temperature range 20 °C to 150 °C.

Technology	Epoxy
Chemical Type	Epoxy
Appearance(Base)	White
Appearance(Activator)	Off white
Appearance(Mixed)	White
Components	Two component-requires mixing
Mix Ratio, by volume Resin: Hardener	3:1
Mix Ratio, by weight Resin: Hardener	2.3:1
Cure	Room temperature cure
Application	Frictionless fluid flow operation

TYPICAL PROPERTIES OF UNCURED MATERIAL

Base:

Viscosity: Brushable

Weight per liter: 1.6 kg/liter

Hardener:

Viscosity: Brushable

Weight per liter: 1.1 kg/liter

Mixed:

Viscosity Brushable

Coverage 0.65 m² @ 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	**60min**	**45min**	**30min**
Full cure	**15hrs**	**12hrs**	**10 hrs.**

Typical cured properties of material

Compressive strength (ASTM D642)	5000-5500 Psi
Flexural strength (ASTM 790)	8500-9000 Psi
Hardness shore D (ASTM D2240)	85-88
Tensile strength (ASTM D882)	5500-6000 Psi
Elongation At break %(ASTM D882)	2.6
Shear strength (ASTM D1002) On grit blasted MS surface	2500-3000 Psi
Abrasion resistance H-18 wheels 1000 cycles (ASTM D 4060)	188mg

Surface preparation: Surface to be coated should be abrasive blast cleaned. Base component and Activator component must be mixed together immediately prior to use. Stir the contents of base component. Continue stirring and gradually add total contents of the activator container. Stir the combined mix until completely homogeneous. The mixed material must be used within 1 hour of mixing at 20°C (68°F

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Application Procedure:

Cerametal 3 can be applied by brush or roller, with brush application being preferred for the coat of a two coat application. Good quality brushes or short to medium pile rollers should be used. Best application results are obtained with a minimum substrate temperature, 15°C to 20°C being the ideal.