

WEARFLEX II

epigen 3523

Tough, resilient, Wearflex is a high impact resistant wearing compound that contains a modified polyurethane hybrid polymer backbone. It is formulated to treat new or worn components to improve or prolong their life under abrasive and erosive conditions. Wearflex is a two part polymer composite comprising graded sintered ceramic of extreme hardness and abrasion resistance. The polymer binder cures to form an infusible material possessing excellent wear resistance to heavy impingement and impact, and adheres strongly to suitably treated metal.

The surface finish may be laid as a thin film with 6mm recommended to be the minimum. It is acceptable to apply high builds in most situations since the thicker the application the longer the life. Application to inverted surfaces can be easily carried out with minimal sag.

TYPICAL APPLICATIONS

Dredge Bowls	Chutes & Bins
Slurry Boxes	Pumps
Reclaimer Buckets	Slurry Lines
Trommel Shells	Screens
Crusher Overflows	Baffle Boxes

INDUSTRY TYPES IN USE

Iron Ore,	Coal Mining,	Diamond
Copper,	Nickel,	Gold
Manganese,	Dredging,	Power Generation

FEATURES

- Excellent wear resistance
- Tough resilient polymer for improved impact resistance
- Unrestricted service in less than 24 hours
- Free of all solvents - zero VOC
- Engineered for high mechanical strength
- Versatility in application
- Cures under cold adverse conditions
- Very easy application in any orientation
- Recoatible with minimal preparation



PROFILE

Colour	Off White Grey
Ratio by weight	2 "A" to 1 "B"
	2 kg Component "A"
	1 kg Component "B"
Pot Life minutes @ 20°C	25
Mixed consistency @ 20°C	Trowellable Putty
Specific gravity when mixed	2.2
Coverage, /m ² @ 10mm	22.0kg

TYPICAL CURED PROPERTIES

Compressive strength ASTM D695, Mpa	>55
Tensile strength ASTM D638, Mpa	>24
Flexural strength ASTM D790, Mpa	>26
Hardness, Shore D	>80
Elongation ASTM D638, %	3.6
Thermal conductivity ASTM C177, Kcal/m.hroC	0.76
Maximum exposure temperature, °C	105
Heat deflection temperature ASTM D648, °C	65
Thin Film Gel @ 10mm, Minutes	90
Thin Film Set @ 10mm, Minutes	130
Ultimate cure time to Service @ 10mm, Hours	24
Thin Film Gel @ 20mm, Minutes	75
Thin Film Set @ 20mm, Minutes	110
Ultimate cure time to Service @ 20mm, Hours	18

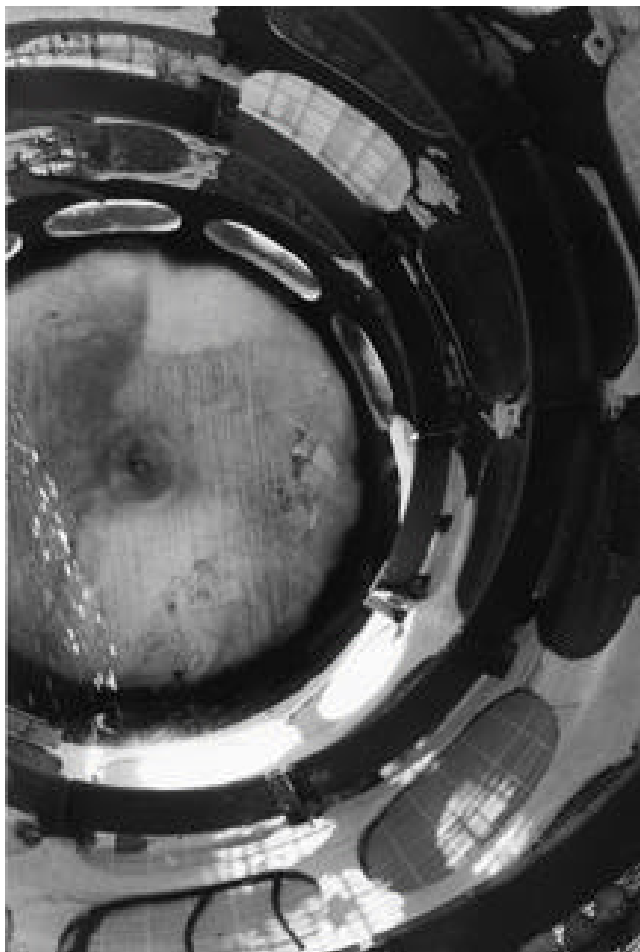
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SURFACE PREPARATION

In line with all cases where good adhesion is expected, the substrate should be reasonably clean and free from loose particles. Methods for substrate preparation include abrasive blasting, etching, grinding or scarifying. The technique best suited depends on the substrate, the service conditions, and practical considerations. Specialist advice is available from Peerless Industrial Systems to ensure the correct preparation procedure is employed for specific applications.

APPLICATION

Mixing of product should be carried out using slow speed mixers or spatulas, and completed by adding to the component "A", the component "B". Ensure the mix is homogenous and free from lumps. Application can be carried out by applying mixed compound directly to the desired area or component with gloved hands or by tools such as paint scrapers, putty knives or flat steel trowels, the later mainly for large horizontal areas. Application can be carried out with relative ease whether in either vertical or horizontal configurations. Wearflex may be finished smooth and flat with the aid of water.



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CHEMICAL RESISTANCE

Tested at 21°C. Samples cured for 10 days at 25°C. Curing at elevated temperatures will improve chemical resistance.

- 1 = Continuous or long term immersion
- 2 = Short term immersion
- 3 = Splash and spills
- 4 = Avoid contact

Acetic Acid, 10 %	2	Acetone	2
Acetic Acid, Glacial	2	Ammonium Chloride	1
Hydrochloric Acid, 5 %	1	Beer	1
Hydrochloric Acid, 10 %	1	Dichloromethane	4
Hydrochloric Acid, conc	2	Diesel Fuel	1
Nitric Acid, 5 %	2	Isopropyl Alcohol	1
Nitric Acid, 10 %	3	Kerosene	1
Phosphoric Acid, 5 %	1	Petrol	1
Phosphoric Acid, 20 %	2	Salt Water	1
Sulfuric Acid, 5 %	2	Sewage	1
Sulfuric Acid, 20 %	3	Skydrol	1
Ammonium Hydroxide, 5 %	1	Sodium Cyanide	1
Ammonium Hydroxide, 20 %	1	Sodium Hypochlorite	2
Potassium Hydroxide, 5 %	1	Toluene	2
Potassium Hydroxide, 20 %	1	Trichloroethane	2
Sodium Hydroxide, 5 %	1	Wine	1
Sodium Hydroxide, 20 %	1	Xylene	1

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CURE

Variations in cure may arise due to the amount of material being applied, the thickness of material being applied, the surface temperature, and the product temperature. The cure may be increased by heating product or by leaving mixed material stand for 15 minutes before use. The cure may be decreased by cooling the product before mixing.

EPIGEN PRODUCTS
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