

## **TECHNICAL DATA SHEET**

SOLIDWEAR HP101 6 August 2021, Rev 3

# **SOLIDWEAR HP101**

High Performance Epoxy Wearing Compound

Solidwear HP101 is a high performance technically advanced epoxy wearing compound containing graded high alumina ceramic bead fillers up to 2 mm, in a blended epoxy resin system. Provides a long lasting lining to plant and equipment subject to a high degree of abrasive wear in highly acidic corrosive environments. Excellent slump resistance on vertical or overhead applications. Can cure underwater.

#### **BENEFITS:**



Excellent acid resistance > 60% Sulphuric acid. Strong acid blends typically used in mine processing.



Cuts down time to a minimum, as most repairs are done on site. Extends life of costly plant and components.



Easy to mix and apply. It conforms and spreads easily into tight corners and curved surfaces.



Can be applied to vertical and overhead surfaces. Applied from 5 mm up to 20 mm.



Water smoothable – Lightly wetting trowel or gloved hand gives a smooth finish.



Rapid Cure - Normally ready to use in 12 hours at normal room temperature - less if heat is applied.



Excellent adhesion to metal and other surfaces under adverse conditions including damp surfaces.



Good low temperature cure down to 5°C.

TECHNICAL DETAILS	
No. of Components	2
Chemical Resistance	Mineral acids and alkalis, aliphatic solvents and petroleum products
Mixing Ratio by Mass	8,05 kg : 0,45 kg Epoxy : Activator
Colour	Grey
Pot Life (500 ml)	30 - 35 minutes
Touch Dry	1 hour
Practical Cure	2 - 3 hours
Full Cure	18 hours
Application	Trowel or gloved hand
Theoretical Coverage	6 L / m² @ 6 mm
Compressive Strength	100 MPa ASTM D-695-54
Tensile Strength	35 MPa
Lap Shear	> 10 MPa
Heat Deflection Temp	80 °C - 90 °C
Volume Solids	100%
Application Temp	5 °C - 35 °C
Cleaner	Epoxy Thinners
Shelf Life	12 months

### **APPLICATIONS**

Any plant and equipment subject to erosion caused by abrasion from process materials. Common areas of application are feed chutes, spigots, pipe elbows, slurry lines, hoppers, chests, settling tanks, cyclones pump casings etc..



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## SUBSTRATE REQUIREMENTS

Surfaces to be clean, dry and free of rust or mill scale. Grit blasting is recommended. If mechanical grinding is used ensure that prepared surface has a rough profile.

### **APPLICATION**

Using a steel trowel or gloved hand apply compound at 4 mm - 6 mm thickness or as specified. Wipe smooth with hands, which are slightly wet with soapy water. Any mixed material will become unusable after 40 minutes. To accelerate curing time post cure after compound has hardened by heating to about 40 °C for 30 minutes.

### **RESISTANCE**

Resists dilute acids and alkalis, aliphatic solvents and petroleum products, seawater and distilled water.

### **SAFETY PRECAUTIONS**

- Ensure adequate ventilation in work area.
- Use protective clothing to avoid skin contact with uncured compound at all times.
- No sparks or naked flame to be permitted in the vicinity while tools and equipment are being cleaned with Epoxy Thinners or other flammable products.

#### **HEALTH AND SAFETY**

Some of the components of this product may be hazardous during mixing and application.

Please read Safety Data Sheet and specific health and safety data for this product provided in compliance with the requirements of OHSA No.85 of 1993. The finished system is not hazardous to health or the environment.

#### WARRANTY

Technical Finishes products are manufactured under high quality standards and are warranted against defective materials and are sold subject to standard Terms and Conditions of Sale, copies of which can be obtained upon request. Technical Finishes deals with approved applicators and carry a back to back warranty with these clients. Technical Finishes cannot be held responsible for the workmanship in surface preparation and application of our products, it is understood that the approved contractor will guarantee workmanship and application. It is vital that the application is done in accordance to our specification.