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METATRON
MINING CONSULTING
MINING SOLUTIONS WITH PASSION AND PURPOSE!

SicaPoxy Wear Compound

MMC SicaPoxy Wear Compound is a premium-grade wear protection system engineered to withstand the harshest industrial environments. The compound is reinforced with high-grade ceramic beads and silicon carbide particles, delivering exceptional resistance against extreme wear conditions such as heavy abrasion, erosion, and particle impact.

The formulation incorporates **advanced fibre technology**, which significantly enhances adhesion strength and impact tolerance, ensuring long-lasting protection even under dynamic loading. The addition of silicon carbide further elevates abrasion resistance, making SicaTuff an ideal solution for extending equipment life and reducing maintenance downtime in demanding applications.

Typical Applications

- Chutes, hoppers, and transfer points handling abrasive materials.
- Cyclones, classifiers, and separators exposed to high particle wear.
- Mining and mineral processing equipment.
- Cement, steel, and power generation industries.
- Pumps, fans, and ducts where erosion resistance is critical.

FEATURES	PROFILE	
Abrasion and impact resistance	Colour	Dark Grey /Black
Silicon Carbide/ ceramic beads	Mix Ratio by weight.	5:1
Fibre technology	Pot Life @25°C	60 minutes
Easy to mix and apply.	Cure Time @25°C	5 Minutes
Excellent adhesion to substrate	Hardness	85 to 95 Shore D
Non – Dangerous Good for transport	Density	2.16 kg/l
Manufactured in Australia	Compressive Strength	80 MPa
Range of colours	Flexural Strength	20 MPa
Range of kit size	Kit Size	7kg
100% solids	Coverage	7kg @ 4mm = 0.7m ²
	Packaging	Part A & B

SicaPoxy Wear Compound - Application Instructions

Surface Preparation:

- All oil, grease, and surface contaminants must be removed using approved cleaning methods (e.g., solvent cleaning or detergent wash).
- Abrasive blast the substrate to achieve a surface profile of **75–100 microns**.
- For small or difficult-to-reach areas, mechanical preparation using hand tools or power tools may be used to clean and abrade the surface. Ensure the substrate is clean, dry, and free from dust before application.

Epoxy Mixing Instructions

- ✓ Ensure the material temperature is between 15°C and 30°C prior to mixing.
- ✓ Use a 2-part epoxy suitable for ceramic-to-steel bonding and capable of withstanding the application's maximum operating temperature.
- ✓ Do not use expired adhesive materials. Confirm shelf life prior to application.
- ✓ Mix only the amount that can be applied within the pot life.
- ✓ Mix Part A and Part B (both are pastes) thoroughly in a clean container or on a mixing board until a uniform color and consistency is achieved.
- ✓ For partial kits, premix each component individually before combining.
- ✓ Use a slow-speed mechanical mixer or spatula and mix for 2–4 minutes for complete blending.
- ✓ Never mix epoxy directly on the prepared steel surface.

Application Procedure

- Mark out the designated area to be trowelled.
- Apply a thin, even layer of mixed epoxy to the prepared surface using a trowel or spatula. This ensures proper wetting and strong adhesion.
- Build up to the required thickness (typically 10mm), applying additional layers as needed.
- In areas with fabrication irregularities, adjust epoxy thickness to achieve a consistent surface.
- For a smooth finish, lightly moisten the trowel or spatula with water and finish the surface accordingly

Benefits

- Extends equipment service life, reducing downtime and maintenance costs.
- Provides reliable performance under extreme operating conditions.
- Protects surfaces from premature failure due to wear and abrasion.
- Reduces need for frequent replacement of components.
- Improves operational efficiency and safety in wear-prone environments.

Safety:

- **Read the Safety Data Sheet (SDS)** before use.
- Wear appropriate **personal protective equipment (PPE)** including gloves, eye protection, and respirators where required.
- Ensure adequate ventilation during application and curing.



