

Epoxy Ceramic Paste

IPC-PT-IC-2L-02-SS • Processing — Ceramic-Filled Erosion & Corrosion Rebuild System

 1 COATS SYSTEM BUILD • NUMBER OF COATS	 1m1 ISO 12944-2:2017 ENVIRONMENT	 1 - 10 mm TOTAL SYSTEM DFT	 HIGH EXPECTED DURABILITY • 15-25 YRS	 Sa 2½ SURFACE PREPARATION GRADE
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DESCRIPTION

A solvent-free, ceramic-filled epoxy paste applied in one coat by brush or putty knife for long-term erosion-corrosion protection of fluid-handling equipment in immersion service. Produces a hard, slick, low-friction surface and rebuilds worn metal seamlessly.

Epoxy Ceramic Paste — Two component, surface tolerant, solvent free, amine cured epoxy filled with ceramic particles, in paste form, for direct application onto steel, concrete and fibreglass. Manufactured in accordance with SANS 1217 Type 1B (potable water); touch dry in 2–3 hours.

SYSTEM BREAKDOWN

SYSTEM BUILD — LAYER • VOLUME SOLIDS • DFT • THEORETICAL YIELD					
Layer	Product	Vol. Solids	DFT	Theoretical Yield ¹	Comments
1st coat	Epoxy Ceramic Paste	100%	1 - 10 mm	1.0 m ² /L @ 1 mm	Brush or putty knife; no primer required
TOTAL	Total system dry film thickness		1 - 10 mm	typical range 1 – 10 mm depending on system	

¹ Theoretical yield = Volume Solids × 10 ÷ DFT (µm), per product TDS — allow for application loss factors.

SURFACE PREPARATION

Abrasive blast clean to Sa 2½ (ISO 8501:2007) / SSPC-SP10, sharp angular profile 75–100 µm. Surfaces dry, clean and free from contamination. Concrete: remove laitance by light abrasive blasting and fill holes with an approved filler.

OVERCOATING INTERVALS

DRYING & OVERCOATING — SUBSTRATE TEMPERATURE AS STATED			
Product	Minimum	Maximum	If window exceeded / notes
Epoxy Ceramic Paste (each coat)	3 h @ 20 °C	36 h @ 30 °C	Two coats required for a pinhole-free film

Overcoating information is a guide only and is subject to climate and site conditions — the product TDS governs.

INTENDED USES & BENEFITS

- Pump casings, impeller blades, gate valves, water boxes and fan blades
- Rebuilding heat exchangers, tube sheets and circulating-water equipment
- Seamless repair of rigid polyurethane and epoxy lining systems
- Immersion service on steel and concrete — wet immersion to 65 °C

ISO 12944 CLASSIFICATION & EXPECTED DURABILITY

Environment classification	1m1 fresh water immersion / erosion service (ISO 12944-2:2017); SANS 1217 Type 1B
Expected durability	High (15–25 years, ISO 12944-1:2017)

SANS 1217 Type 1B manufacture per TDS; durability statement is a Specialized Coating Systems technical assessment for correctly applied linings in design service.

NOTE: All products shall be applied according to the instructions and within the application parameters given on the Speccoats™ Technical Data Sheet (TDS) for each product — the TDS governs in any conflict. Expected durability = time to first major maintenance (ISO 12944-1:2017), not a guarantee.