

Epoxy Ceramic PW

Solvent free epoxy coating filled with ceramic particles

A two component, surface tolerant solvent free amine cured epoxy coating filled with ceramic particles, supplied in a high viscosity form, for direct application onto steel, concrete & fibreglass surfaces.

Intended Uses:

A high build, high performance solvent free epoxy formulation that provides long term corrosion protection to steel & concrete in immersion conditions.

Epoxy Ceramic PW is also used as a seamless repair material for rigid polyurethane & epoxy systems.

Properties:

- Fast cure, touch dry in 2 hours.
- Designed to seal and protect new equipment exposed to erosion and corrosion.
- Protect pump casings, impeller blades, gate valves, water boxes and fan blades.
- Rebuild heat exchangers, tube sheets and other circulation water equipment.
- Excellent abrasion resistance.
- Produces a hard-slick surface.
- Resistant to cutting oils, petrol & dilute acids & alkalis.
- No primer required.
- Manufactured in accordance with SANS 1217 Type 1B Potable Water.

Technical Data:

Colour	White
Viscosity	145 – 150 KU
Finish	Semi-gloss
Volume Solids	100%
Mix Ratio (Volume)	2 : 1
Activator	Epoxy Activator Ceramic PW
Typical Film Thickness	500 – 1000µm DFT depending on system
Theoretical Coverage	2 m ² / Litre @ 500µm DFT, allow for loss factors
Method of Application	Brush
Number of Coats	Two coats should be applied to achieve typical DFT and a pinhole free coating.
Flash Point	N/A
Induction Period	Not required
Temperature Resistance	Wet immersion - 65°C Dry continuous - 80°C Intermittent repairs - 105°C
V.O.C	Nil

Drying Information:

	0°C	10°C	20°C	30°C	40°C	50°C
Touch Dry	-	8 hrs	3 hrs	1 hr	45 min	30 min
Hard Dry	-	12 hrs	5 hrs	3 hrs	1.5 hrs	1 hr
Overcoating Data – See Limitations						
Substrate Temp.	0°C	10°C	20°C	30°C	40°C	50°C
Minimum	-	8 hrs	3 hrs	1 hr	45 min	30 min
Maximum	-	-	-	36 hrs	-	-

Note: A curing temperature below 10°C is not recommended, adequate ventilation should be maintained during application and curing.

Certifications:

Epoxy Ceramic PW Has the Following Approvals:

- SANS 1217:2011 – Conforms with the requirements for drinking water.

Consult A Specialized Coating Systems technical representative for details.

Surface Preparation:

Abrasive Blast Cleaning and Mechanical Preparation

All surfaces to be coated must be dry, clean, and free from contamination. This product must only be applied to surfaces prepared by abrasive blast cleaning to Sa 2½ in accordance with International Standard ISO 8501:2007 and SSPC-SP10. A sharp angular profile of 75 – 100 microns is recommended.

Concrete

Remove all dirt, oils, grease etc. and any loose material. All laitance should be removed by light abrasive blasting. Holes in concrete should be filled with an approved filler.

Application:

Mixing	Material is supplied in two containers as a kit. Always mix a complete kit in the quantities supplied. Once mixed the product should be used within the pot life specified. Stir the base component well with a flat-bottomed paddle or mechanical mixer until product is uniform. Continue stirring and add the entire contents of the activator container. Continue stirring until the mixture is homogeneous. Transfer the mixed contents to a clean container and continue to mix with a clean mixer to avoid any contamination by unmixed material. Ensure that sufficient material be mixed so that the product can be applied within its use-able life. The temperature of the mixed product should preferably be above 10°C.	
Mix Ratio	2 part(s) base : 1 part(s) activator by volume.	
Pot Life	25 minutes at 25°C	
Brush	Recommended	
Thinner	Not required	Temperature can be used to control viscosity.
Cleaner	SA65 Thinners	For dry paint & equipment
Work Stoppage	Work strictly in accordance with the specified pot life of the material. Discard material after expiration of pot life. Thoroughly flush and clean all equipment with SA65 Thinner. Once the kit has gelled, recommence work with freshly mixed units.	

Industrial & Protective: Steel & Concrete Protection - Immersion

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Clean Up	Clean all equipment immediately after use with SA65 Thinner . It is advisable to periodically flush out spraying equipment during the course of the working day. Frequency of cleaning is dependant of upon the amount sprayed, temperature and elapsed time. Work strictly in accordance with the specified pot life of the material.
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Environment:

	Surface Temperature	Ambient Temperature	Relative Humidity
Minimum	10°C*	10°C	No lower limit
Maximum	60°C**	45°C	100%

* Or 3°C above dew point.

** Higher temperatures result in reduced sag resistance and faster cure.

Limitations:

- Overcoating information is given for guidance only and is subject to local climate and environmental conditions. Consult a Specialized Coating Systems representative for specific recommendations.
- For best results bring the material temperature between 20 – 30°C, unless specifically instructed otherwise, prior to mixing with and application.
- Unmixed material (in closed containers) should be maintained in protected storage in accordance with information given in the STORAGE section of this data sheet.
- Technical and application data herein is for the purpose of establishing a general guideline of the coating application procedures.
- Test performance results were obtained in a controlled laboratory environment and Specialized Coating Systems makes no claim that the exhibited published test results, or any other tests, accurately represent results found in all field environments. As application, environmental and design factors can vary, due care should be exercised in the selection and verification of the performance and use of the coating.
- This product will chalk on the surface when exposed to sunlight.

Pack Size:

- 1 & 5 Litre.
- 100 & 200ml squish packs.

Storage:

- Shelf Life: 18 months at 25°C from date of manufacture. Subject to inspection thereafter.
- Store in dry conditions out of direct sunlight, away from sources of heat or ignition.

Precautions:

For complete safety and handling information please refer to the appropriate Safety Data Sheets prior to using this product.