



PRITHVI AQUASHIELD

Category: Hybrid Polyurea Coating – Waterproofing

1. PRODUCT DESCRIPTION

PRITHVI AQUASHIELD is a high-performance, two-component hybrid polyurea coating designed for waterproofing applications. This hybrid polyurea features an extended set time enabling application by brush or roller. It cures quickly within 20 minutes to form a tough, chemical and abrasion-resistant coating. Despite the extended initial cure time, it achieves the optimum mechanical properties and durability characteristic of standard polyurea coatings after full crosslinking.

2. RECOMMENDED USES / APPLICATIONS

- Waterproofing for tanks, reservoirs, water and wastewater treatment plants; water tanks and sewage treatment facilities
- Floor and deck coatings in industrial and commercial applications, including roofs and terraces requiring seamless waterproof membranes
- Repair and touch-up of damaged polyurea or polyurethane coatings, protective coatings for joints and seams, and infrastructure requiring chemical and abrasion resistance

3. KEY FEATURES & BENEFITS

- Zero VOC and environmentally friendly formulation
- Excellent adhesion to a variety of substrates including concrete, steel, and previously coated surfaces
- Outstanding abrasion and chemical resistance, with high tensile strength and elongation for flexible, durable protection
- High thermal stability; can be applied by brush or roller, suitable for both new waterproofing projects and rehabilitation/maintenance

4. PHYSICAL & CHEMICAL PROPERTIES

PROPERTY	TYPICAL VALUE	TEST METHOD / STANDARD
Appearance	Liquid, two-component hybrid polyurea coating	Visual
Volume Solids (%)	100%	ASTM D2369
VOC Content (g/L)	Zero	—
Shelf Life	Store in a cool, dry place away from direct sunlight and ignition sources	—
Tensile Strength	Approx. 9 MPa	ASTM D638
Elongation	Approx. 670%	ASTM D638
Tear Propagation Resistance	Approx. 40 N/mm	DIN ISO 34-1



PROPERTY	TYPICAL VALUE	TEST METHOD / STANDARD
Thermal Stability	High	—

5. COMPOSITION / CHEMICAL BASE

Two-component hybrid polyurea system (Resin and Hardener).

6. APPLICATION DETAILS

Mixing Ratio (Base : Hardener)	1 kg : 0.32 kg by weight (Resin : Hardener)
Pot Life	Approx. 20 minutes @ 30°C
Induction Time	Not required
Application Method	Brush, Roller
Thinner / Reducer	Do not thin — use as supplied
Cleaning Solvent	Suitable solvents (e.g. acetone or MEK) for tool cleaning
Number of Coats	Apply evenly to achieve required film thickness; avoid over-application or puddling
Drying Time – Touch Dry	Approx. 20 minutes (initial cure)
Overcoating Interval (Min – Max)	Existing coatings <3 days old: wipe with acetone/MEK; if left uncoated >24 hours, abrade mechanically before recoating
Full Cure	7 days
Application Conditions	Apply over a primed, properly prepared substrate; allow primer to cure fully (typically 5–6 hours) before topcoat

7. SURFACE PREPARATION

- New concrete should cure at least 28 days at ambient temperature; achieve a surface roughness profile of 150–200 microns
- Remove laitance, contaminants, and loose material via abrasive blasting or equivalent methods; steel surfaces prepared to near white metal blast for best adhesion
- Prime with the recommended primer and allow to cure fully (typically 5–6 hours) before applying PRITHVI AQUASHIELD

8. PACKAGING

Kit Components	Resin and Hardener supplied as a two-component kit (1 : 0.32 by weight)
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9. STORAGE & SHELF LIFE

Store material in a cool, dry place away from direct sunlight and ignition sources.

10. HEALTH, SAFETY & HANDLING

Use appropriate personal protective equipment such as gloves, goggles, and suitable respiratory protection. Ensure proper ventilation during mixing and application. Avoid skin and eye contact; wash immediately in case of contact. Avoid inhaling vapors or mists. Store material in a cool, dry place away from direct sunlight and ignition sources. Refer to the Safety Data Sheet (SDS) for complete health, safety, handling and disposal information prior to use.

11. QUALITY & COMPLIANCE

- *Manufactured under controlled quality processes (certification details to be confirmed)*
- *Regulatory compliance information available on request*

DISCLAIMER

The information contained in this Technical Data Sheet is provided in good faith and is based on Prithvi Coatings' current knowledge and testing believed to be reliable. It is intended as a general guide only and does not constitute a warranty of performance, as actual results may vary depending on application conditions, substrate, and equipment beyond our control. Users should conduct their own trials to confirm suitability for their specific purpose prior to full-scale use. Prithvi Coatings reserves the right to amend this data without prior notice as products are continually reviewed and improved. Please ensure you are referring to the most current version of this document.