

Technical Data Sheet

AS-A125

Acrylic copolymer liquid additive Waterproof Coat

1. DESCRIPTION

AquaShark® AS-A125 is a modified acrylic copolymer liquid designed for use as a multi-purpose additive with cement to improve bond strength, flexibility, workability, and water resistance. AS-A125 acts as an excellent bonding agent for all cement renders, concrete repairs, and screed toppings.

2. USES

- Waterproof coating for wet areas, kitchens, balconies, terraces, and water tanks.
- High-strength bonding slurry prior to applying renders, screeds, or concrete toppings.
- Corrosion protection slurry coat for steel reinforcement bars.
- Patching mortar for reprofiling and repairing chipped or spalled concrete edges.
- Admixture with cement paint for improved water resistance and covering capacity.

3. KEY FEATURES & ADVANTAGES

- **Water Resistant:** Drastically reduces water absorption and moisture penetration.
- **Flexibility & Strength:** Improves mortar tensile strength and flexibility, allowing thin section application.
- **Strong Bonding:** Exceptional adhesion to concrete, masonry, and cementitious substrates ($> 2 \text{ N/mm}^2$).
- **Pore Sealer:** Seals surface porosity of concrete surfaces to prevent dusting.
- **Water Reduction:** Reduces water demand for equivalent workability, boosting final mortar density.
- **Chemical Barrier:** Prevents ingress of chloride ions, carbon dioxide, and water-soluble salts.
- **Safe & UV Stable:** Water-based, non-toxic, low odour, safe to use, and UV stable (can be left exposed).

4. TECHNICAL SPECIFICATIONS & PHYSICAL PROPERTIES

Property	Specification / Value (@ $27 \pm 1^\circ\text{C}$)
Appearance	Milky white coloured free-flowing liquid
Specific Gravity	1.025 – 1.035 g/cc
pH (IS 9103-1999)	> 7.0
Solid Content (IS 101-1993)	30% to 32% (w/w)

Ash Content (IS 101-1993)	< 1%
Viscosity (Ford Cup No. 4)	11 – 13 seconds
Re-coat Time / Full Cure	4 – 6 hours / 14 days
Permeability of Waterproof Coating (DIN 1048 Pt 5)	18.21 mm @ 5 bar for 72 hours
Bond Strength to Concrete (ASTM C882/87 @ 14 days)	> 2.0 N/mm ² (or concrete failure)
Compressive Strength (IS 516 @ 28 days with OPC 53)	> 30.0 N/mm ²
Pack Sizes Available	1 Litre, 5 Litres & 20 Litres containers

5. MIX PROPORTIONS & COVERAGE ESTIMATES

A. As a Coating / Slurry (Mix Ratio 1 : 2 by volume with OPC Cement)

Material Component	One Coat on Concrete (kg/m ²)	Two Coats on Concrete (kg/m ²)
AquaShark® AS-A125	0.250 kg	0.375 kg
OPC Cement	0.500 kg	0.750 kg

B. As a Topping (@ 1.5 mm thickness — quantities to cover 1 m²)

Material Component	Quantity required for 1 m ²
AquaShark® AS-A125	0.65 kg
OPC Cement	1.30 kg
Fine Silica Sand	1.30 kg
Total Mix Weight	3.25 kg / m ²

6. APPLICATION INSTRUCTIONS

A. Surface Preparation

- **General:** Surface must be structurally sound, clean, dry, and free of oil, grease, wax, polish, laitance, dust, and loose particles.
- **Joint Treatment:** All cracks, construction joints, pipe penetrations, bore packings, and corners must be treated prior to coating.

B. Mixing & Application Methods

- **Bonding Slurry:** Dampen concrete to Saturated Surface Dry (SSD) condition. Mix 1 part AS-A125 with 2 parts OPC cement (by volume). Brush onto prepared surface. Apply subsequent toppings wet-on-wet while slurry is still tacky.
- **Waterproof Coating:** Dampen surface to SSD. Mix 1 part AS-A125 : 2 parts OPC cement (by volume). Brush 2 coats onto damp surface with a re-coat interval of 4–6 hours.
- **Brush Topping:** Dampen surface to SSD. Mix 1 part AS-A125 : 2 parts OPC cement : 2 parts fine silica sand (by weight). Apply with a brush as a topping at 1.5 mm thickness.
- **Patching Mortar:** Mix 1 part AS-A125 : 2 parts OPC cement : 3 parts fine silica sand (by weight). Use a mason's trowel to fill and level depressions and spalls.
- **Cement Paint Admixture:** Blend 3–4 litres of AS-A125 with 50 kg cement paint until homogeneous. Brush apply two coats (re-coat interval 2–4 hours) to extend coverage and water resistance.

C. Curing Procedures

- **Initial Curing:** Air dry for 4–6 hours initially. Under hot/windy conditions, cover with polythene sheet to prevent rapid moisture loss.
- **Moist Curing:** After 6 hours, moist cure for the next 24 hours by spraying/sprinkling potable water. Never allow coating to dry out completely or remain submerged in water.

7. CLEANING, STORAGE, SAFETY & DISCLAIMER

- **Cleaning:** Wash hands, brushes, and rollers with water immediately while material is fresh. Remove hardened material mechanically with a coarse wire brush.
- **Storage & Shelf Life:** 12 months shelf life when stored in original unopened packaging in cool, dry conditions clear of the ground.
- **Health & Safety:** Provide adequate ventilation. Wear gloves and eye protection. In case of eye contact, rinse immediately with clean water and seek medical advice. Wash skin with soap and water. Refer to SDS.
- **Warranty & Disclaimer:** BGSB Construction Products Ltd warrants that its products are free from manufacturing defects. Technical data are given in good faith based on laboratory testing and site experience. BGSB accepts no liability for loss arising from improper application or site execution.