

High-Performance Polyaspartic Polyurea Repair Varnish

PFS MGB-820: High-Performance Polyaspartic Polyurea Repair Varnish

PFS MGB-820 is a high-performance, two-component polyaspartic polyurea transparent coating specifically engineered for exterior wall restoration. Comprising a polyaspartic resin base (Part A) and a weather-resistant isocyanate hardener (Part B), it provides a durable, UV-stable, and waterproof membrane designed to protect and beautify tile-based building facades.

Key Advantages

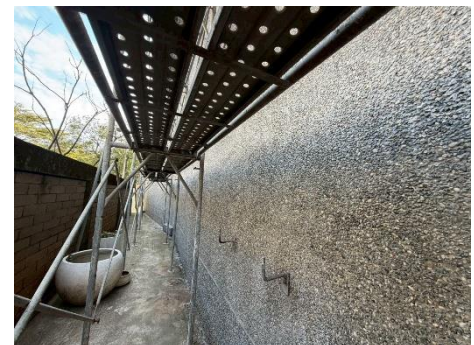
- **Superior Weather Resistance:** Exceptional UV stability prevents yellowing, chalking, and degradation even under prolonged sun exposure.
 - **High Elasticity:** Excellent elongation properties allow the coating to bridge hairline cracks and accommodate structural movement.
 - **Exceptional Waterproofing:** Creates a seamless, non-porous barrier that prevents water ingress through tiles and grout lines.
 - **Strong Adhesion:** Formulated for superior bonding to polyurea primers and properly prepared tile substrates.
 - **High Solid Content:** $\geq 80\%$ solids by weight ensures a robust film build and reduced solvent emissions.
 - **Aesthetic Clarity:** Available as a colorless or light-yellow transparent liquid to maintain the original appearance of the substrate.
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Typical Applications

- **Exterior Wall Restoration:** Specialized repair of tile-based building facades.
 - **Waterproofing Maintenance:** Sealing of weathered surfaces to prevent leaks.
 - **Protective Overcoat:** UV-stable topcoat for polyurea systems to enhance durability and color retention.
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Application Guidelines

- **Mixing Ratio:** 1:1 by weight (Part A : Part B)
- **Surface Preparation (Tiles):**
 - **Cleaning:** Use specialized abrasive powder to remove polishing wax, oil, and contaminants from the tile surface.
 - **Rinsing:** Wash thoroughly with high-pressure water and allow the substrate to dry completely.
 - **Priming:** Apply a suitable primer to ensure maximum adhesion between the tile and the repair varnish.
 - **Surface Prep:** Substrates must be clean, dry, and free of oil, dust, and rust. Smooth surfaces should be sanded to enhance adhesion. Pre-wetting with a light water mist may assist the foaming reaction in certain environments.
- **Application Method:**
 - Apply 1–2 coats using a brush, roller, or spray equipment.
 - Ensure even coverage; typical wet film thickness is 100–150µm depending on substrate condition.
- **Curing Profile (at 25°C):**
 - Tack-Free Time: Approx. 4 Hours
 - Hard Dry: Approx. 10 Hours
 - Full Cure: 7 Days



Storage & Packaging

- **Packaging:** Available in 10kg, 20kg, or 40kg sets (A:B = 1:1).
- **Shelf Life:** 12 months when stored in original, unopened containers.
- **Storage Conditions:** Store in a cool, dry, and ventilated environment at 5°C – 30°C. Keep away from fire and heat sources.
- **Note:** Part B (Curing Agent) may crystallize if stored below 0°C. If this occurs, heat gently or leave at room temperature until dissolved before use.

Safety & Personal Protective Equipment (PPE)

- **Skin Protection:** Wear impervious gloves and protective clothing. Clean skin with appropriate cleaners immediately after contact.
- **Eye Protection:** Safety goggles are mandatory. If contact occurs, flush with plenty of water and seek medical advice.
- **Ventilation:** Ensure excellent ventilation. Contains flammable substances; strictly no smoking or open flames in the work area.

Technical & Physical Data

Property	Test Method	Result
Appearance	Visual	Colorless / Light Yellow Liquid
Solid Content	—	≥ 80% (Mixed)
Density	—	1.0 ± 0.05 g/cm ³
Tensile Strength	ASTM D412	> 10 MPa
Elongation at Break	ASTM D412	≥ 150%
Adhesive Strength	—	≥ 2.0 MPa (on primer)
Flash Point	—	> 25°C