



## HYDAPOXY 002 EPOXY GROUT 2 PART

### ABOUT HYDAPOXY 002

**HYDAPOXY 002** is a high-performance, stain-free epoxy grout specially formulated for interior and exterior floor and wall applications. Engineered for demanding environments, it is ideal for grouting all types of ceramic, vitrified, semi-vitreous, glass mosaic, metal tiles, natural stones, engineered stones, and precast terrazzo.

**HYDAPOXY 002** complies with **ANSI A118.3**, **ISO 13007 – 3 (RG)**, and **EN 13888** standards, offering unmatched chemical, thermal, and water resistance. Its colour-fast, anti-bacterial, and anti-fungal formulation ensures long-lasting durability and hygiene in both commercial and residential installations, including wet and high-traffic areas.

Its advanced composition makes it the perfect solution for facilities where aesthetics, hygiene, and performance are equally critical – such as institutional kitchens, cafeterias, residential washrooms, schools, spas, and swimming pools.

### SURFACE APPLICATION MATERIALS

- Ceramic tile
- Vitrified tiles
- Granite
- Precast terrazzo tiles
- Glass Mosaic Tiles
- Metal tiles
- Marble
- Engineered stone (Agglomerates)

### APPLICATION AREAS

- Cafeterias & institutional washrooms
- Balconies & covered exterior walls/floors
- Residential & commercial applications
- New construction & renovation projects
- Schools, hospitals & public restrooms
- Swimming pools, saunas, jacuzzis
- Wet areas & water bodies
- Interior & exterior tile joints

## PRODUCT HIGHLIGHTS

- ❖ **STAIN-FREE FINISH** – Ensures long-lasting, clean joints that resist dirt and discoloration.
- ❖ **COLOUR FAST & UNIFORM** – Maintains consistent colour, even in wet or high-traffic areas.
- ❖ **CHEMICAL & TEMPERATURE RESISTANT** – Suitable for industrial kitchens and chemical-prone spaces.
- ❖ **EASY TO CLEAN** – Smooth finish that simplifies maintenance in demanding areas.
- ❖ **ANTI-BACTERIAL & ANTI-FUNGAL** – Ideal for hygiene-sensitive applications like food prep areas.
- ❖ **NO CRACKING OR POWDERING** – Offers strong, stable grout lines with excellent mechanical strength.
- ❖ **WATER & SHOCK RESISTANT** – Great for wet areas and high-footfall environments.
- ❖ **FOOD-GRADE COMPOSITION** – Safe for use in food processing and preparation zones.

## TECHNICAL DETAILS

### ANSI DATA

PROPERTY	TEST METHOD	REQUIREMENT	HYDAPOXY 002 VALUES
Water Cleanability	ANSI A118.3 Clause 5.1	>80 Minutes	95 – 115 Minutes
Initial Setting Time	ANSI A118.3 Clause 5.2	>120 Minutes	245 – 315 Minutes
Service Setting Time	ANSI A118.3 Clause 5.2	≤7 Days	3 –4 Days
Shrinkage After 7 Days	ANSI A118.3 Clause 5.3	<0.25%	0.04%
Sag in Vertical Joints	ANSI A118.3 Clause 5.4	No change in shape of joint	Pass
Bond Strength to Quarry Tile	ANSI A118.3 Clause 5.5	>1000 psi (6.87 MPa)	1102 psi (7.59 MPa)
Compressive Strength After 7 Days	ANSI A118.3 Clause 5.6	>3500 psi (24.06 MPa)	>3917 psi (27.01 MPa)
Tensile Strength After 7 Days	ANSI A118.3 Clause 5.7	>1000 psi (6.87 MPa)	>1152 psi (7.94 MPa)
Thermal Shock Resistance	ANSI A118.3 Clause 5.8	>500 psi (3.43 MPa)	>602 psi (4.15 MPa)

## EN / ISO DATA

PROPERTY	TEST METHOD	REQUIREMENT	HYDAPOXY 002VALUES
Abrasion Resistance	ISO 13007-4 Clause 4.4; EN 12808-2	$\leq 250 \text{ mm}^3$	43-46 $\text{mm}^3$
Flexural Strength Under Standard Conditions	ISO 13007-4 Clause 4.1.3; EN 12808-3	$\geq 30 \text{ N/mm}^2$	$> 35 \text{ N/mm}^2$
Compressive Strength Under Standard Conditions	ISO 13007-4 Clause 4.1.4; EN 12808-4	$\geq 45 \text{ N/mm}^2$	47 $\text{N/mm}^2$
Shrinkage	ISO 13007-4 Clause 4.3; EN 12808-4	$< 1.5 \text{ mm/m}$	0.9-1.1 $\text{mm/m}$
Water Absorption After 240 Minutes	ISO 13007-4 Clause 4.2; EN 12808-5	$\leq 0.1 \text{ g}$	0.008 g

## APPLICATION INSTRUCTIONS

### SUBSTRATE PREPARATION GUIDELINES

- CLEAN & STABLE SURFACE** – Ensure grout joints are clear of debris and the tile surface is clean and dry. Remove dust, dirt, and contaminants. Avoid using acid cleaners. If used, flush thoroughly with clean water.
- EVEN & LEVEL BASE** – Substrate temperature must be between 60°F (16°C) and 90°F (32°C) before starting application. Ensure all tile surfaces are set and stable prior to grouting.
- DRY & MOISTURE-CONTROLLED** – Joints should be completely dry before grouting. Excess moisture may affect bonding and stain-free performance.
- PRE-WET IF NECESSARY** – Lightly dampen only when needed, especially if cleaning residue. Ensure the surface is not wet at the time of application.
- CURE NEW CONCRETE** – Newly applied tile beds must be fully set and dry before applying HYDAPOXY 002 grout.
- PRESERVE EXPANSION JOINTS** – Provide and maintain movement joints (as per EJ171) especially in external areas. Fill them using a flexible sealant and do not grout over them to avoid cracks due to structural movement.

### HOW TO MIX THE ADHESIVE

- MIXING RATIO** – HYDAPOXY 002 is supplied in pre-measured units. Mix the full contents of Part A (Hardener) with Part B (Resin) as provided.
- BLENDING PROCESS** – Empty Part A completely into the container of Part B. Mix thoroughly using a margin trowel or a slow-speed drill mixer until a consistent, smooth blend is achieved.

3. **RESTING PERIOD** – Use immediately after mixing. Do not allow the mix to sit idle for extended periods. Pot life is approximately 45 minutes at 21°C.
4. **APPLICATION CAUTION** – Apply immediately to the working area using standard epoxy grouting tools or a caulking gun. Avoid over-mixing or mixing partial quantities. Do not add water or any additional material.

## **STEP-BY-STEP TILE APPLICATION GUIDE**

### **1. SURFACE PREPARATION**

- Clean the tile surface and grout joints thoroughly to remove all dust, dirt, and debris.
- Ensure joints are completely dry before grouting.
- Avoid using acid cleaners prior to grouting. If used, flush the area with plenty of clean water and allow to dry fully.
- Substrate temperature must be between 16°C and 32°C (60°F to 90°F) before application.

### **2. TILE PLACEMENT**

- Perform a mock-up with actual tiles/stones to check colour suitability and potential staining.
- For highly absorbent tiles/stones, conduct a test patch to prevent discoloration or colour bleeding.
- Do not apply in direct sunlight—cover and shade the area during application.
- In exterior settings, ensure that proper movement joints are incorporated to prevent cracking.

### **3. ACHIEVING FULL ADHESION**

- Mix Part A (Hardener) into Part B (Resin) using a margin trowel or slow-speed drill mixer until fully blended.
- Pour the entire mixed content onto a plastic-covered working area.
- Pack HYDAPOXY 002 firmly into joints using a grout float or a caulking gun for precise placement.
- Ensure all joints are completely filled and excess grout is removed promptly.

### **4. SPACING & CLEANING**

- After 8-15 minutes of application, clean the surface using the sponge provided with clean water.
- Use a clean white towel to wipe tile surface and remove any residue.
- Final cleaning should be done within 24 hours using a mild soap solution to eliminate haze.
- Do not leave grout on tile faces for extended periods as it may cause staining or haze.

### **5. SPECIAL CONSIDERATIONS**

- HYDAPOXY 002 is a rigid, stain-free epoxy grout—does not absorb movement in tile/stone.
- In outdoor installations, follow EJ 171 standards for movement joints and fill them with flexible sealants.
- Not recommended for soft, polished marbles or delicate glazed tiles.
- Plan for 7-day protection in open areas (like pools) post-grouting before water exposure.
- Store product in sealed containers between 10°C and 35°C, away from sunlight.

## PRO TIPS & PRECAUTIONS

- ✓ Use within 45 minutes of mixing—pot life is limited.
- ✓ Foot traffic allowed after 24 hours; heavy traffic after 7 days.
- ✓ Maximum stain resistance achieved after 10 days—avoid acid or harsh cleaners during this period.
- ✓ For large format tile exteriors or areas exposed to high concentrations of acids, seek guidance from technical experts or opt for a more specialized industrial-grade epoxy solution.
- ✓ HYDAPOXY 002 does not substitute for waterproof membranes—use HYDAWET WP 11 or HYDAGUARD WP 12 for waterproofing needs.
- ✓ Routine cleaning with neutral pH cleaner is advised to maintain long-term performance.

## PRODUCT SPECIFICATIONS & STORAGE GUIDELINES

### AVAILABLE PACKAGING

- 1.0 kg
- 5.0 kg

(Factory-proportioned kit: Hardener – Part A and Resin – Part B)

### COLOUR OPTIONS

- Wide range of colours available

**SHELF LIFE** : 24 months from the manufacturing date when stored in original sealed packaging under shaded, dry conditions (50°F–95°F or 10°C–35°C)

### STORAGE LIFE:

- Store between 10°C and 35°C
- Keep containers tightly sealed when not in use
- Discard product if packaging is damaged or contents show signs of hardening
- Keep away from:
  1. Direct sunlight
  2. Moisture or high humidity
  3. Excessive heat or freezing temperatures

## GROUTING INSTRUCTIONS

### 1. WAITING TIME:

- Ensure tile/stone is clean, firmly set, and joints are completely dry before starting. Do not grout immediately after acid washing—rinse thoroughly and wait until dry.

### 2. RECOMMENDED PRODUCTS:

- For best stain resistance in interior or exterior tile and stone applications, use HYDAPOXY 002, a high-performance stain-free epoxy grout.

- For large-format tile or stone installations in open, high-stress areas, consult technical experts for suitable joint solutions.
- Use a compatible flexible sealant in all movement joints, especially in external installations.

### 3. APPLICATION TIP:

- Conduct a sample test with actual tile/stone before full application—especially on porous materials.
- Avoid applying grout over tiles susceptible to staining or colour leaching without testing first.
- In external areas (e.g., pools or water bodies), shield the application from direct sunlight for at least 7 days before exposing to water.
- Follow proper surface preparation: clean joints, remove dust/debris, and ensure substrate temperature is within 16°C–32°C (60°F–90°F).
- Mix the entire contents of Part A into Part B until completely blended. Use a trowel or slow-speed mixer. Do not apply partially mixed material.

### COVERAGE DETAILS

- Coverage depends on tile size, joint width, and depth

### FACTORS AFFECTING COVERAGE:

- Joint dimensions (width and depth)
- Tile or stone size
- Surface texture and porosity
- Application method (float or gun)
- Wastage or excess material during application

## SAFETY & APPLICATION GUIDELINES FOR HYDAPOXY 002

### 1. PERSONAL PROTECTION

- Always wear protective gloves, clothing, and safety goggles when handling HYDAPOXY 002.
- Ensure adequate ventilation during use.
- Keep product away from children. For professional use only.

### 2. EMERGENCY PROCEDURES

- **Skin Contact:** Rinse immediately with clean running water and soap.
- **Eye Contact:** Flush eyes with water for at least 15 minutes. Seek medical attention if irritation persists.
- **Inhalation:** Move to fresh air. Get medical attention if symptoms develop.
- **Ingestion:** Do not induce vomiting. Seek immediate medical attention.

### 3. MIXING INSTRUCTIONS

- Mix HYDAPOXY 002 Part A (Hardener) completely into Part B (Resin) using a slow-speed drill mixer or margin trowel until a uniform consistency is achieved.
- Do not add water, cement, sand, or any additives.

- Immediately pour mixed contents onto the working area and begin grouting. Do not allow mix to sit in the container.

#### **4. SURFACE PREPARATION**

- Ensure grout joints are free from dust, debris, and moisture before application.
- Do not use acid cleaners prior to grouting. If acids were used, rinse the area thoroughly with clean water and allow joints to dry completely.
- Substrate temperature should be between 16°C (60°F) and 32°C (90°F).
- Perform a site mock-up to check for color bleed or surface discoloration, especially with porous or light-colored tiles/stones.

#### **5. INSTALLATION & PROTECTION**

- Use standard epoxy grouting tools or caulking gun for joint filling.
- Avoid leaving excess material on tile surfaces. Clean within 8-15 minutes of application using water and the sponge provided.
- After initial cleaning, use a clean towel to remove any remaining residue. Perform final cleaning within 24 hours using mild detergent.
- In exterior installations, protect the grout from direct sunlight for 7 days. Avoid filling swimming pools or water bodies until this curing period is complete.
- Always incorporate movement joints as per industry guidelines (e.g., EJ 171), especially in outdoor areas.

#### **PERFORMANCE LIMITATIONS**

- HYDAPOXY 002 is a rigid epoxy grout and does not accommodate structural movement. Use movement joints and flexible sealants where required.
- Do not apply on soft, polished marble or delicate glazed tiles prone to discoloration.
- Maximum stain resistance is achieved 10 days post-installation. Avoid acidic cleaners during this time.
- Not a substitute for waterproofing membranes. Use appropriate systems like HYDAWET WP 11 when waterproofing is needed.
- Store in factory-sealed containers between 10°C and 35°C for up to 2 years. Protect from direct sunlight.