

# ColourMax Plus Urethane Grout Technology

## PRODUCT DESCRIPTION

ColourMax Plus Grout is a PRE-MIXED urethane based sanded grout for ceramic, porcelain, glass and natural stone tile installations on floors and walls. Ready-to-use ColourMax Plus Grout provides stain resistance, colour uniformity and overall performance superior to cementitious grouts. For interior and exterior applications on joint widths of 1.6 mm (1/16") to 13mm (1/2").

## FEATURES

- Chemical, Stain and Mildew Resistant
- Pre-mixed single-part product provides: No dust, no mess
- Plenty of working time
- Excess product can be saved and used later
- Pigment-free formulation provides:
  - Absolute colour uniformity every time
  - No batch control problems
  - No fading, streaking or shading
- Ease of application and ease of clean-up
- UV stable, non yellowing
- Semi flexible, low shrinkage and high crack resistance
- Non-sag, excellent for vertical applications
- Contributes to USGBC LEED Credits: MR 2.1 & 2.2 (Construction Waste Management), MR 4.1 & 4.2 (Recycled Content), and EQ, 4.1 (Low-Emitting Materials).

## LIMITATIONS/CAUTIONS

Read and understand Technical Data Sheet and Material Safety Data Sheet completely before beginning installation. Follow applicable TTMAC, ANSI, TCNA and NTCA installation standards. Always do a test area to ensure product satisfaction, including adhesion to substrate, and/or to become familiar with proper application techniques prior to use.

- Do not use FlexCure® Urethane Grout Cure Accelerator.
- Not for use in heavy industrial applications (i.e. chemical plants), in areas subjected to harsh or persistent chemicals, or areas exposed to very aggressive cleaning routines such as steam or pressure washing. Flextile Flexepoxy 100 100% Solids Epoxy Grout is recommended for these ultra aggressive environments.
- Protect grout from staining agents and chemicals during the cure process.
- Do not use vinegar or acid solutions for clean-up; this could damage uncured grout.
- \*Do not use enzyme based cleaners for floor cleaning.
- Seal porous tile surfaces with a water-based sealer, including the sides of the stone, prior to grouting with ColourMax Plus Grout.
- Use care on soft, highly polished surfaces to avoid scratching. Test a small area. Use of a sealer is always recommended on polished marble, stone, slate and other natural, porous tiles.
- Protect grout from freezing. Do not grout outdoors or in unheated areas when temperatures are expected to be below 5°C (40°F) within 3 days. If product freezes, return to room temperature and use as directed.

## APPLICABLE STANDARD

ColourMax Plus Grout is a revolutionary new technology which employs state of the art urethane chemistry. As yet, there is no current ANSI or ASTM standard for this technology (ANSI 118.3 pertains only to epoxy grout products); however, for comparative purposes, physical and chemical properties are listed in the table below. ColourMax Plus Grout is designed to have the perfect balance of physical properties in order to provide flexibility, strength and adhesion to a variety of materials, making it the best choice for a wide variety of applications.

## TYPICAL PHYSICAL PROPERTIES

Description	Typical Results
ASTM C267 Chemical	Pass
Water Cleanability	Pass
Initial Set	>2 hrs.
Service Strength	Pass
Vertical joint sag	Pass
Tensile strength	3.5MPa (510 psi)
Compressive strength	29MPa (4200 psi)
Linear Shrinkage	.06%
Water absorption	<1%
Colours	15 available
Specific Gravity	1.4

• Results shown are typical and reflect test procedures used by Tile Council of North America (TCNA) for ANSI 118.3.

## WORKING PROPERTIES

Description	Time Required
Working Time	3 hrs
Tack Free Time	8 hrs
Ready for light foot traffic	24 hrs
Ready for heavy foot traffic	72 hrs
Stain Resistant 72 hours*	3 days
Showers, outdoors and wet areas	7 days

Check with Flextile Technical Department for specific applications  
 • Results are typical but reflect test procedures employed.  
 Actual results may vary with particular environmental conditions and other factors.  
 \*Wait 7 days before cleaning tile and grout surface

## CHEMICAL RESISTANCE CHART

Chemical	Exposure
Acetic Acid, 3%	Pass
Acetic Acid, 10%	Pass
Ammonium chloride	Pass
Citric Acid Solution, 30 g/l	Pass
Citric Acid Solution, 100 g/l	Pass
Lactic Acid	Pass
Phosphoric Acid, 3%	Pass
Phosphoric Acid, 10%	Pass
Sulfamic Acid, 3%	Pass
Sulfamic Acid, 10%	Pass
Bleach	Pass
Hydrochloric Acid, 3%	Pass
Hydrochloric Acid, 10%	Pass
Potassium Hydroxide, 30 g/l	Pass
Potassium Hydroxide, 100 g/l	Pass

## COVERAGE

TILE SIZE (inches) (cm)	JOINT WIDTH					
	1/16"	1/8"	3/16"	1/4"	3/8"	1/2"
1" x 1" x 1/4" 2.54 x 2.54 x .63	63	32	NR	NR	NR	NR
2" x 2" x 1/4" 5.08 x 5.08 x .63	126	63	NR	NR	NR	NR
4 1/4" x 4 1/4" x 5/16" 10.79 x 10.79 x .79	214	107	71	54	36	27
4" x 8" x 1/2" 10.15 x 20.30 x 1.27	168	84	56	42	28	21
6" x 6" x 1/2" 15.23 x 15.23 x 1.27	189	95	63	47	32	24
8" x 8" x 3/8" 20.30 x 20.30 x .95	337	168	112	84	56	42
12" x 12" x 3/8" 30.45 x 30.45 x .95	505	253	168	126	84	63
13" x 13" x 3/8" 32.99 x 32.99 x .95	547	274	182	137	91	68
16" x 16" x 3/8" 40.61 x 40.61 x .95	673	337	224	168	112	84
18" x 18" x 3/8" 45.69 x 45.69 x .95	758	379	253	189	126	95
12" x 24" x 3/8" 30.45 x 60.96 x .95	758	379	253	189	126	95
24" x 24" x 3/8" 60.96 x 60.96 x .95	1010	505	337	253	168	126

Approximate coverage in square feet per Full Unit (18 lbs) or in square meters per Full Unit (8.16 kg)

### SHELF LIFE

ColourMax Plus Grout is guaranteed to remain suitable for use up to a period of two (2) years if stored unopened at temperatures between 0°C (32°F) and 38°C (100°F). After opening, ColourMax Plus Grout can be saved for reuse if properly resealed in original container (always wipe the pail lip clean prior to resealing to ensure proper seal is achieved with the Vapor-Lock lid). If product freezes, return to room temperature, mix well, and use as directed.

### Preparation for Grouting:

- For use in joints 1.5mm (1/16") or greater. Ensure that joints are well packed. Smaller joints may require extra effort.
- To speed up installation, or for quarry and other porous tile and/or outdoor applications, pre-wet tile surface using clean water with a damp sponge prior to spreading grout, being careful not to leave standing water in the grout joints.
- To facilitate cleaning, pre-seal all porous tile and natural stone before grouting.
- For glass tile, polished marble, stone and other soft surfaces, test grout on a small area to ensure compatibility.
- Maintain temperature above 5°C (40°F) during installation and curing.
- A milky, white liquid may be present on the surface of the grout when opened. This is from normal settling during shipment. The use of a margin trowel is recommended to bring grout into suspension. If a drill mixer is used, mix at low speed for no more than 30 seconds. Over-mixing with a drill mixer may introduce excessive air into the product and cause grout sagging on vertical applications and/or other performance issues. Continue to mix with a margin trowel throughout the grouting process.
- Ensure tile is firmly set and mortar is completely dry (always follow manufacturer's instructions) before grouting. Remove all spacers, water, debris and adhesive from tile joints.
- For best results, surface of tile should be at room temperature 21°C to 24°C (70°F to 75°F). Urethane materials are affected by temperature and humidity variations. Cool temperatures and/or high humidity will slow cure time.
- Make sure grout joints are clean, dry, and free from solvents and residue before grouting.

### Application:

- Spread grout using a green, sharp-edged, firm rubber grout float. Work the grout diagonally across the joints, packing them full.
- Remove excess grout from the tile surface, pulling the edge of the float diagonally across the joint to prevent grout removal.

### Grout Cleaning:

**For best results, remove grout haze AS YOU WORK, particularly in warm or dry climates.**

If working alone, only grout as far as you can reach 1 m<sup>2</sup> (10-12 ft<sup>2</sup>) area before initial cleaning. If working as a team, one person should grout, with the other(s) cleaning immediately behind the first person.

- Rinse sponge in water and wring out completely. Since urethane grout requires very little water during cleanup, make sure that the sponge is wrung nearly dry. Wipe lightly, leaving sponge flat on the tile surface to prevent grout removal from joints. Excessive water during cleanup can dilute the urethane binder and cause curing issues that may lead to grout failure.
- Wipe up spilled water immediately. Do not allow water to sit on grout surface or in ungrouted joints.
- Change water mixture after each 9 m<sup>2</sup> (100 ft<sup>2</sup>), for each new bucket of grout, or when dirty.
- Check work as you clean. Repair any low spots with additional grout. Unlike other grouts, DO NOT over wash.

- Allow cleaned areas to dry, and then inspect tile / stone surface. If a second cleaning is necessary, wait 24 hours and spray a film remover Flextile ColourMax Plus Haze Cleaner on a white Doodlebug™ cleaning pad, rubbing the tile lightly to remove any remaining urethane haze, then using a damp sponge and clean water, wipe the surface to remove the film remover (do not flood surface with cleaner). Do not use vinegar or acid solutions for clean-up; this could damage uncured grout. Do not use enzyme based cleaners for floor cleaning. Do NOT use excessive water for cleaning or cleanup, this could damage uncured grout. Finish by drying the tile surface with a clean towel or cloth.

### CURING AND PROTECTION

- Protect finished surface from light traffic for at least 24 hours 21°C (70°F). Heavy foot traffic requires 72 hours at 21°C (70°F) and 50% relative humidity or until grout is hard and tack free. Protect from chemical exposure for 21 days. See Limitations/Cautions above for further curing requirements.
- If needed, cover ONLY with kraft or breathable paper after initial 24-hour curing period.
- Full cure depends on grout depth. Normal cure of a 6mm (¼") grout joint with a 9mm (3/8") thick tile is 28 days.

### SHOWERS / STEAM SHOWERS / WET APPLICATIONS

- Use an approved waterproof sealer for mud bed applications and follow manufacturer's recommendations for sealer installation. For liquid-applied waterproofing materials, apply to within 25mm (1") of any drains to prevent weep hole blockage. The use of pre-sloped, waterproof trays (instead of mud beds) is highly recommended.
- Shower and wet area installations must be protected from moisture and allowed to cure for 7 days before use. Check with Flextile Technical Department for specific applications

### MAINTENANCE

ColourMax Plus Grout requires occasional cleaning with water and common grout cleaners. For best stain resistance, always clean up spills immediately.

### CAUTION: SKIN, EYE AND RESPIRATORY IRRITANT. HARMFUL OR FATAL IF INGESTED.

Handling Procedures: Avoid eye, skin and respiratory contact. Wear safety glasses, impervious gloves and protective equipment.

First Aid Measures: If contact with eyes, flush with water for 15 minutes. If contact with skin, remove clothing and wash with soap and water. If ingested, do not induce vomiting, seek medical attention. Keep out of reach of children.

### SAFETY

Refer to Flextile Material Safety Data Sheet for detailed health and safety information.

### AVAILABILITY AND COSTS

ColourMax Plus is available from Flextile Ltd. and its distributors in 4.08 kg (9lb) or 8.16kg (18lb) units. Cost: Data supplied upon request.

### TECHNICAL SERVICES

Flextile maintains a well-equipped laboratory able to test its products in conjunction with the products with which they are used. Technical assistance for use of Flextile products is available upon request.

### WARRANTY

Flextile warrants that this product is of merchantable quality and is suitable for the purpose for which it is intended. Flextile's liability under this warranty shall be limited to replacement of its product found to be defective or, at its option, a refund of the purchase price.