

### **DESCRIPTION**

Ultracolor Plus FA with DropEffect™ technology is an ultra premium, fine-aggregate, fast-setting, polymer-modified, color-consistent, nonshrinking, efflorescence-free grout for joint widths from 1/16" to 3/4" (1,5 to 19 mm). DropEffect reduces surface absorption to help repel water, dirt and grime from penetrating grout joints. Ultracolor Plus FA is specially formulated with MAPEI's High-Hydrated Cement Technology (HCT™) to eliminate the common problems related to Portland-cement grout, such as color consistency and efflorescence. Along with offering higher polymer content, HCT reduces absorption and increases stain resistance when compared with standard-performance cement grouts. Ultracolor Plus FA is formulated with 10% recycled content and meets the ANSI A138.1 specification for GreenSquared certification.

### **FEATURES AND BENEFITS**

- Fine aggregate (FA) allows for narrow joint widths and improved cleanability
- No efflorescence (free of Portland cement)
- · Easy to install and stain-resistant
- No sealer required

## **INDUSTRY STANDARDS AND APPROVALS**

ISO 13007: Classification CG2WAF

- ANSI: Meets or exceeds ANSI A118.6 and A118.7 industry standards
- SCS GreenSquared: Certified per ANSI A138.1

LEED v3 Points Contribution

MR Credit 5, Regional Materials\* ...... Up to 2 points

Adhesives & Sealants	1 point
IEQ Credit 4.3, Low-Emitting Materials – Flooring Systems	1 point
LEED v4 Points Contribution	LEED Points
MR Credit Material Ingredient Reporting – Health Product Declaration (HPD)	1 point

\* Using this product may help contribute to LEED certification of projects in the categories shown above. Points are awarded based on contributions of all project materials.

## WHERE TO USE

IEO Cradit A.1. Low-Emitting Materials -

- Commercial and residential construction suitable for both interior and exterior installations
- For grouting dimensional stone, slate, granite, stone agglomerates and most types of ceramic, ceramic mosaic, quarry, brick paver, porcelain, glass and clay tiles
- For application in submerged conditions (swimming pools, spas, water features and fountains), allow for 72 hours of curing time.
- For use where grout will be exposed to foot traffic within 3 to 4 hours
- For joint widths from 1/16" to 3/4" (1,5 to 19 mm)

## **LIMITATIONS**

 Sealing is not required. However, a high-performance penetrating grout sealer may still be applied from MAPEI's *UltraCare*™ family of sealers, which includes Penetrating Plus Stone, Tile & Grout Sealer; and Penetrating



- Plus SB Stone & Porcelain Tile Sealer. Follow the directions provided in the *UltraCare* Maintenance Guide.
- Do not use when a highly chemical-, impact- and stainresistant grout is required or in heavy industrial tile installations. Instead, use an appropriate MAPEI epoxy grout (see the respective Technical Data Sheet [TDS] for details).
- When grouting in temperatures above 80°F (26°C), see the Technical Bulletins at www.mapei.com or consult MAPEI's Technical Services Department.

Consult MAPEI's Technical Services Department for installation recommendations regarding substrates and conditions not listed.

### SURFACE PREPARATION

- Certain tiles with high absorption, surface porosity or rough surfaces may require sealing before grouting to prevent permanent staining.
- The application of a grout release over certain types
  of porcelain or textured surface tiles or stone may be
  advantageous where a fine surface porosity might trap
  fine particles or color pigments. Seek the advice of the
  tile or stone manufacturer and site-test (mock up) on
  separate samples before grouting.
- Caution: Some types of glass, glazed ceramic tiles, marble, granite and marble agglomerates can be permanently stained, scratched, dulled or damaged when grouted with pigmented grout or sanded grout formulas. Generally, lighter-shade grout is best suited for grouting white or light-colored marble or granite. Take all the necessary precautions to ensure that the marble, granite or tiles are compatible with colored grouts. Check the tile or marble manufacturer's literature and test grout on a separate sample area before grouting to determine the suitability of the product with colored and/or sanded grouts.
- Before grouting, make sure that the tiles or stones are firmly set and that the adhesive or mortar is completely dry.
- Remove all spacers, pegs, ropes and strings.
- Grout joints must be clean and free of standing water, dust, dirt and foreign matter. Remove excess adhesive or mortar from the joint area so that 2/3 of the depth of the tile is left available for grouting.
- Clean the tile or stone surface thoroughly to remove dust, dirt and other contaminants that may cause grout discoloration.

See MAPEI's "Surface Preparation Requirements" document in the Reference & Installation Guides section of the Tile & Stone Installations Systems page on MAPEI's Website.

### **MIXING**

Choose all appropriate safety equipment before use. Refer to the Safety Data Sheet for details.

- For best results, have the same person mix all of the grout. Consistent mixing techniques will promote more uniform results.
- Before mixing the grout with water, dry-blend the
  product to avoid color variations in the finished grout,
  which may arise from pigment settling during shipment.
  If two or more bags are to be used, all of the contents
  should be dry-blended together.
- 3. Mix *Ultracolor Plus FA* with cool, clean water only. Do not mix with grout additives. Mix by using the following water-to-grout proportions:

<u>Water</u> <u>Ultracolor Plus FA powder</u>

1 to 1.1 U.S. qts.

(0,95 to 1,04 L) 10 lbs. (4,54 kg)

2.6 to 2.8 U.S. qts.

(2,46 to 2,65 L) 25 lbs. (11,3 kg)

- 4. Pour the required measured amount of clean, cool water into a clean mixing container. Gradually add the proportionate amount of *Ultracolor Plus FA* while slowly mixing. To avoid shade variation of the finished joint, always add the powder to the water while being consistent in the mixing process and the quantity of water used from batch to batch.
- Mix thoroughly with a low-speed mixer (at about 350 rpm) for about 3 to 5 minutes, or until obtaining a smooth, creamy, homogenous paste consistency and a uniform shading of the colored grout.
- Avoid air entrapment from prolonged mixing, which will shorten the pot life.
- Allow the grout to sit ("slake") in the container for about 2 to 3 minutes.
- 8. Remix for about 30 seconds without adding more liquid or powder.
- 9. Wash tools immediately with fresh water.

### PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

- Use only at temperatures between 50°F and 100°F (10°C and 38°C). With temperatures above 85°F (29°C), use cold water to mix the powder.
- 2. Using consistent application and cleaning procedures will produce consistent results.
- To aid in spreading the grout, slightly moisten the tile or stone surface with a damp sponge just before application. Do not flood the tiles or allow water to stand in the ungrouted joint areas.
- 4. Force *Ultracolor Plus FA* into the joints with a rubber grout float. Make sure all joints are well-compacted and free of voids and gaps.
- Remove excess grout from the tile surface, moving the grout float diagonally to the joints while the *Ultracolor Plus FA* is still fresh.



- 6. The grout surface should be flush with the tile edge.
- Some stiffening may occur before all material is used (usually within about 1 hour at room temperature). If this occurs, simply remix but do not add more liquid.
- Provide for expansion and control joints as specified per TCNA Handbook method EJ171 or TTMAC Specification Guide 09300, Detail 301EJ.
- Allow the Ultracolor Plus FA to firm up in the joints sufficiently to avoid damaging the grout surface – usually in 15 to 30 minutes, depending upon the temperature, humidity and absorption rate of the tile or stone. Nonvitreous wall tile that absorbs water quickly requires less time for grout to firm up – only 5 to 10 minutes after installation.
- 10. Use two buckets of cleaning water: one for rinsing the majority of the grout residue from the grout sponge, and one for moistening the sponge in clean water.
- 11. Dip the sponge in a bucket of water and wring out the excess, so that the sponge does not drip water. Using very little pressure, pull the sponge diagonally across the grout joints to remove the excess grout from the tile surface. Also use the sponge to smooth the surface of the grout joint. Turn the sponge over and make another pass in an adjacent area. After using both sides, rinse the sponge in one bucket and wring out the excess water. Dip the sponge in the second bucket of water, wringing out the excess and continue the process.
- 12. Change the water in the buckets frequently to help limit the amount of haze that forms on the tile or stone surface.
- To prevent discoloration and soft/powdery joints, avoid cleaning with excessive water.
- 14. To control color variations, buff the grouted surface with cheesecloth or a clean, dry cotton cloth when a haze is visible on the tile surface, usually 30 to 60 minutes after grouting. This should remove any remaining surface water or grout residue.
- 15. Wash tools immediately with fresh water.
- 16. Never use acid for cleaning marble, glazed tile or pigmented grout surfaces. If a persistent haze remains after normal cleaning, see the Technical Bulletins at www.mapei.com or consult MAPEI's Technical Services Department.

### **PROTECTION**

- Provide for dry, heated storage on site and deliver materials at least 24 hours before tilework begins.
- For at least 72 hours after completion, protect from rain and freezing, and do not immerse the installation in water.
- <u>Floors</u>: Keep the installation free from foot traffic for at least 3 hours after grouting.
- Walls: Protect the installation from impact, vibration and hammering on adjacent and opposite walls for 14 days after tile installation (see the TDS of the adhesive or setting system for details).
- Because temperature and humidity (during and after installation of tile)
  affect the final curing time of all cement-based materials, allow for extended
  periods of curing and protection when temperatures drop below 60°F
  (16°C) and/or when the relative humidity is higher than 70%.

### **MAINTENANCE**

- Grout must be cured for at least 24 hours before regular cleaning.
- MAPEI grout products are produced to the highest quality of standards.
   To maintain a clean tile surface, use a neutral-pH cleaner for maintaining the floor, followed by a clean water rinse.
- Do not use harsh chemical cleaners to maintain the tile surface.
   Before proceeding with cleaning, consult the cleaner's manufacturer for compatibility, use and application instructions. Remove or rinse fatty acid residue from the grout surface to avoid potential grout deterioration caused by prolonged exposure.
- A high-performance penetrating grout sealer may still be applied from MAPEI's *UltraCare* family of sealers, which includes Penetrating Plus Stone, Tile & Grout Sealer; and Penetrating Plus SB Stone & Porcelain Tile Sealer. Follow the directions provided in the *UltraCare* Maintenance Guide.

## ISO 13007 Classification

Classification Code	Test Characteristics	Classification Requirement
CG2 (cementitious grout, improved)	Shrinkage	≤ 0.30% shrinkage in 28 days
W (reduced water absorption)	Water absorption	≤ 5 g after 4 hours
A (high abrasion resistance)	Abrasion resistance	≤ 1,000 mm³
F (rapid-setting)	Compressive strength	≥ 2,175 psi (15 MPa) after 24 hours

# **ANSI Specification**

Test Method	Specification Standard	Test Results		
ANSI A118.7 — compression	3,000 psi (20,7 MPa) at 28 days	3,000 to 5,500 psi (20,7 to 37,9 MPa) at 28 days		
ANSI A118.7 – shrinkage	< 0.20% at 27 days	< 0.20% at 27 days		
ANSI A118.7 – tensile strength	500 psi (3,45 MPa) at 28 days	500 to 600 psi (3,45 to 4,14 MPa) at 28 days		
ANSI A118.7 – water absorption	< 5% (50% relative humidity to immersion)	< 5% (50% relative humidity to immersion)		
ANSI A118.7 – flexural strength	1,000 psi (6,90 MPa) at 28 days	1,000 to 1,400 psi (6,90 to 9,66 MPa) at 28 days		

# Shelf Life and Product Characteristics (before mixing)

Shelf life	1 year when stored in original, unopened packaging at 73°F (23°C) in a dry area
Physical state	Powder

# **Application Properties** at 73°F (23°C) and 50% relative humidity

Mixing ratio	Per 10 lbs. (4,54 kg) of grout powder: 1 to 1.1 U.S. qts. (0,95 to 1,04 L) of water  Per 25 lbs. (11,3 kg) of grout powder: 2.6 to 2.8 U.S. qts. (2,46 to 2,65 L) of water
VOCs (Rule #1168 of California's SCAQMD)	0 g per L
Pot life*	30 minutes to 1 hour
Application temperature range	50°F and 100°F (10°C and 38°C)
Curing time*	72 hours

<sup>\*</sup> Pot life and curing time vary based on jobsite conditions, including cold temperatures or high humidity.

# Packaging

Size	
Bag: 10 lbs. (4,54 kg)	
Bag: 25 lbs. (11,3 kg)	

### Approximate Coverage\*



Per 25 lbs. (11,3 kg). Coverages in sq. ft. (m²).								
Tile Size		Grout Joint Width						
	1/16"	1/8"	3/16"	1/4"	3/8"	1/2"	5/8"	3/4"
	(1,5 mm)	(3 mm)	(4,5 mm)	(6 mm)	(10 mm)	(12 mm)	(16 mm)	(19 mm)
1" x 1" x 1/4"	97	49	33	25	17	13	10	9
(25 x 25 x 6 mm)	(9,01)	(4,55)	(3,07)	(2,32)	(1,58)	(1,21)	(0,93)	(0,84)
2" x 2" x 1/4"	194	97	65	49	33	25	20	17
(50 x 50 x 6 mm)	(18,0)	(9,01)	(6,04)	(4,55)	(3,07)	(2,32)	(1,86)	(1,58)
3" x 3" x 1/4"	291	146	97	73	49	37	30	25
(75 x 75 x 6 mm)	(27,0)	(13,6)	(9,01)	(6,78)	(4,55)	(3,44)	(2,79)	(2,32)
4" x 8" x 1/2"	259	130	87	65	44	33	26	22
(100 x 200 x 12 mm)	(24,1)	(12,1)	(8,08)	(6,04)	(4,09)	(3,07)	(2,42)	(2,04)
4-1/4" x 4-1/4" x 1/4"	413	207	138	104	69	52	42	35
(108 x 108 x 6 mm)	(38,4)	(19,2)	(12,8)	(9,66)	(6,41)	(4,83)	(3,90)	(3,25)
6" x 6" x 1/4"	582	291	194	146	97	73	59	49
(150 x 150 x 6 mm)	(54,1)	(27,0)	(18,0)	(13,6)	(9,01)	(6,78)	(5,48)	(4,55)
6" x 6" x 1/2"	291	146	97	73	49	37	30	25
(150 x 150 x 12 mm)	(27,0)	(13,6)	(9,01)	(6,78)	(4,55)	(3,44)	(2,79)	(2,32)
6" x 24" x 3/8"	621	311	207	156	104	78	63	52
(150 x 610 x 10 mm)	(57,7)	(28,9)	(19,2)	(14,5)	(9,66)	(7,25)	(5,85)	(4,83)









8" x 8" x 3/8"	518	259	173	130	87	65	52	44
(200 x 200 x 10 mm)	(48,1)	(24,1)	(16,1)	(12,1)	(8,08)	(6,04)	(4,83)	(4,09)
12" x 12" x 3/8"	776	388	259	194	130	97	78	65
(300 x 300 x 10 mm)	(72,1)	(36,0)	(24,1)	(18,0)	(12,1)	(9,01)	(7,25)	(6,04)
12" x 24" x 3/8"	1,035	518	345	259	173	130	104	87
(300 x 600 x 10 mm)	(96,2)	(48,1)	(32,1)	(24,1)	(16,1)	(12,1)	(9,66)	(8,08)
13" x 13" x 3/8"	841	421	281	211	141	106	85	71
(330 x 330 x 10 mm)	(78,1)	(39,1)	(26,1)	(19,6)	(13,1)	(9,85)	(7,90)	(6,60)
18" x 18" x 3/8"	1,164	582	388	291	194	146	117	97
(457 x 457 x 10 mm)	(108)	(54,1)	(36,0)	(27,0)	(18,0)	(13,6)	(10,9)	(9,01)
20" x 20" x 3/8"	1,294	647	432	324	216	162	130	108
(508 x 508 x 10 mm)	(120)	(60,1)	(40,1)	(30,1)	(20,1)	(15,1)	(12,1)	(10,0)
24" x 24" x 3/8"	1,552	776	518	388	259	194	156	130
(610 x 610 x 10 mm)	(144)	(72,1)	(48,1)	(36,0)	(24,1)	(18,0)	(14,5)	(12,1)
32" x 32" x 3/8"	2,069	1,035	690	518	345	259	207	173
(812 x 812 x 10 mm)	(192)	(96,2)	(64,1)	(48,1)	(32,1)	(24,1)	(19,2)	(16,1)

<sup>\*</sup> Coverage shown is for estimating purposes only. Actual jobsite coverage may vary according to actual tile size and thickness, exact joint width, job conditions and grouting methods. Consult MAPEI's Technical Services Department or use the grout calculator at www.mapei.com to determine the amount of product needed for project criteria not shown.

### **RELATED DOCUMENTS**

Technical Bulletin: Grout Cleaning	041101-T*
Grout Troubleshooting Guide	TSIS Reference and Installation Guides*
Technical Bulletin: How to Install Grout in Hot Weather	010404-TB*

<sup>\*</sup> At www.mapei.com

Refer to the SDS for specific data related to health and safety as well as product handling.

#### **LEGAL NOTICE**

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at

www.mapei.com. Any alterations to the wording or requirements contained in or derived from this TDS shall yold all related mapei warranties.

Before using, the user must determine the suitability of our products for the intended use,

and the user alone assumes all risks and liability.

ANY CLAIM SHALL BE DEEMED WAIVED
UNLESS MADE IN WRITING TO US WITHIN
FIFTEEN (15) DAYS FROM DATE IT WAS,
OR REASONABLY SHOULD HAVE BEEN,
DISCOVERED.

We proudly support the following industry organizations:























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### **Technical Services**

1-800-992-6273 (U.S. and Puerto Rico) 1-800-361-9309 (Canada)

### **Customer Service**

1-800-42-MAPEI (1-800-426-2734)

#### Services in Mexico

0-1-800-MX-MAPEI (0-1-800-696-2734)

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