

# **DESCRIPTION**

*Keracolor S* is a premium-grade, preblended, polymer-modified sanded Portland-cement tile grout that requires only the addition of water for mixing. It will grout joints from 1/8" to 5/8" (3 to 16 mm).

For interior/exterior floors and walls

#### **CLASSIFICATION STANDARDS**

**ISO 13007:** Keracolor S is CG2WA = a cementitious (C) grout (G) that is improved (2), and has reduced water absorption (W) and high abrasion resistance (A).

**ANSI:** Meets or exceeds ANSI A118.6 industry standards

### **USES**

- For grouting interior/exterior residential and commercial floor and wall surfaces in dry or wet conditions
- For grouting dimensional stone, slate, granite, stone agglomerates and most types of ceramic, ceramic mosaic, quarry, brick paver, porcelain, glass and clay tiles
- For joint widths from 1/8" to 5/8" (3 to 16 mm) (see "Technical Notes")
- For application in submerged conditions (swimming pools, spas, water features and fountains), once fully cured (after 21 days)

# **TECHNICAL NOTES**

- Do not use to grout joints less than 1/8" (3 mm) wide. Instead, use Keracolor U unsanded grout or an appropriate MAPEI epoxy grout (see the respective Technical Data Sheet [TDS] for details).
- Do not use when a highly chemical-, impact- and stain-resistant grout is required or in heavy industrial tile installations. Instead, use an appropriate MAPEI epoxy grout (see the respective TDS for details).
- Use only at temperatures between 50°F and 100°F (10°C and 38°C).
  When grouting in temperatures above 80°F (26°C), see the Technical Bulletins at www.mapei.com or consult MAPEI's Technical Services Department.
- BioBlock™ technology has been added to select MAPEI products to help protect them from mold and mildew. BioBlock technology provides built-in protection without expensive additives, extra steps or added time.
  - Consult your federal, state and local environmental and health departments for recommendations on preventing mold and mildew. For the most current information on BioBlock technology, visit www.mapei.com.
- Caution: Some types of 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, white grout is best suited for grouting white or light-colored marble or granite. Take all the necessary precautions to

Keracolor" S

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.

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

### INSTRUCTIONS

# 1. Surface Preparation

- 1.1 Certain tiles with high absorption, surface porosity or rough surfaces may require sealing before grouting to prevent permanent staining.
- 1.2 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 cement particles or color pigments. Seek the advice of the tile or stone manufacturer and site-test (mock up) on separate samples before grouting.
- 1.3 Before grouting, make sure the tiles or stones are firmly set and the adhesive or mortar is completely dry.
- 1.4 Remove all spacers, pegs, ropes and strings.
- 1.5 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.
- 1.6 Clean the tile or stone surface thoroughly to remove dust, dirt and other contaminants that may cause grout discoloration.

### 2. Mixing

- 2.1 For best results, have the same person mix all of the grout. Consistent mixing techniques will promote more uniform results.
- 2.2 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 cartons or bags are to be used, dry-blend all of the contents together.
- 2.3 Mix *Keracolor S* with cool, clean water only. Do not mix with grout additives. Mix by using the following water-to-grout proportions:

<u>Water</u>	<i>Keracolor S</i> powder
13 U.S. oz. (384 mL)	5 lbs. (2,27 kg)
26 U.S. oz. (769 mL)	10 lbs. (4,54 kg)
2 U.S. qts. (1,89 L)	25 lbs. (11,3 kg)
1 U.S. gal. (3,79 L)	50 lbs. (22,7 kg)

- 2.4 Pour the required measured amount of clean, cool water into a clean mixing container. Gradually add the proportionate amount of *Keracolor S* 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.
- 2.5 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.
- 2.6 Avoid air entrapment from prolonged mixing, which will shorten the pot life.
- 2.7 Allow the grout to sit ("slake") in the container for about 5 minutes.
- 2.8 Remix for about 1 to 2 minutes without adding more liquid or dry powder.
- 2.9 Wash hands and mixing tools with water immediately after mixing.

# 3. Application

- 3.1 Use only at temperatures between 50°F and 100°F (10°C and 38°C). See "Technical Notes."
- 3.2 Using consistent application and cleaning procedures will produce consistent results.
- 3.3 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.
- 3.4 Force *Keracolor S* into the joints with a rubber grout float. Make sure all joints are well-compacted and free of voids and gaps.
- 3.5 Remove excess grout from the tile surface, moving the grout float diagonally to the joints while the *Keracolor S* is still fresh.
- 3.6 The grout surface should be flush with the tile edge.
- 3.7 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 any liquid.

# 4. Expansion and Control Joints

- 4.1 Provide for expansion and control joints where specified. Refer to the most current TCNA handbook for ceramic tile installation, Detail EJ-171 or TTMAC Specification Guide 09300 Detail #301MJ.
- 4.2 Do not cover any substrate expansion joints or control joints with *Keracolor S*.
- 4.3 When necessary, cut tiles along both edges of the expansion joints. Do not allow tile and mortar to overlap the joints.



### TECHNICAL DATA

**ISO 13007:** Keracolor S is CG2WA.

**ANSI:** Meets or exceeds ANSI A118.6 industry standards.

Pot life at 73°F (23°C)	About 1 hour
Compressive strength at 28 days	>3,500 psi (24,1 MPa)
Specific gravity (paste)	
pH	About 12
Shelf life	2 years when stored in original sealed container in a dry area and at room temperature
Health and safety	Consult the Material Safety Data Sheet (MSDS) for safe-handling instructions

### **PACKAGING**

Bag: 5 lbs. (2,27 kg), Canada only

Bags: 10 lbs. (4,54 kg); 25 lbs. (11,3 kg); 50 lbs. (22,7 kg)

#### **COLORS**

Keracolor S is available in a wide range of popular colors. Refer to grout chip kits and color cards for the complete color range available.

Various external factors may affect the color shading of the grout; examples include varying joint widths, porosity of the tile set, quantity and quality of water used for mixing and cleanup, temperature, humidity, and cleaning procedures. All of these factors are beyond the control of MAPEI; therefore, consistent shading of the grout cannot be guaranteed.

Efflorescence (a whitish powder or surface crust) can occur with any Portland-cement product. Keracolor S is made with Portland cement. For this reason, MAPEI cannot guarantee that efflorescence will not occur. If it does, follow industry-accepted cleaning procedures. Also see the Technical Bulletins at www.mapei.com or consult MAPEI's Technical Services Department.

- 4.4 Protect the edges of the tilework with metal strips (edge metal), along both sides of the structural building expansion joints.
- 4.5 Install the specified compressible bead and sealant into all expansion and control joints.

# 5. Cleaning

- 5.1 Allow the *Keracolor S* 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.
- 5.2 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.
- 5.3 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.
- 5.4 Change the water in the buckets frequently to help limit the amount of haze that forms on the tile or stone surface.
- 5.5 To prevent efflorescence, discoloration and soft/powdery joints, avoid cleaning with excessive water.
- 5.6 To control color variations and minimize efflorescence, buff the grouted surface with cheesecloth or a clean, dry cotton cloth when a haze is visible on the tile surface, usually one to two hours after

- grouting. This should remove any remaining surface water or grout residue.
- 5.7 Clean hands and tools with clean, soapy water while grout is fresh.
- 5.8 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.

### 6. Protection

- 6.1 Provide for dry, heated storage on site and deliver materials at least 24 hours before tilework begins.
- 6.2 For residential showers and tub surrounds, restrict use for 24 to 48 hours after grouting and for 14 days for steam showers.
- 6.3 For at least 21 days after completion, protect from freezing and do not immerse installation in water (see the TDS of the adhesive or setting system for details).
- 6.4 Floors: Keep free from heavy traffic for at least 72 hours after grouting.
- 6.5 Walls: Protect 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).
- 6.6 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 cure and protection when temperatures drop below 60°F (16°C) and/or when the relative humidity is higher than 70%.

# 7. Maintenance

- 7.1 Sealing the grout is recommended but not mandatory. When choosing a sealer, follow the recommendations and instructions of the sealer manufacturer.
- 7.2 Grout must be fully cured for 21 days before regular cleaning.
- 7.3 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 chemicals or no-rinse cleaners (including enzyme-based no-rinse cleaners) to maintain the tile surface. Before proceeding with cleaning, consult the cleaner's manufacturer for compatibility, use and application instructions.

# **APPROXIMATE COVERAGES\***

For 5-lb. (2,27-kg) bag. Coverages in sq. ft. (m²).							
Tile Size	Grout Joint Width						
THE SIZE	1/8" (3 mm)	3/16" (4,5 mm)	1/4" (6 mm)	3/8" (10 mm)	1/2" (12 mm)	5/8" (16 mm)	
1" x 1" x 1/4" (25 x 25 x 6 mm)	9 (0,84)	6 (0,56)	4 (0,37)	3 (0,28)	2 (0,19)	1 (0,09)	
2" x 2" x 1/4" (50 x 50 x 6 mm)	19 (1,77)	12 (1,11)	9 (0,84)	6 (0,56)	4 (0,37)	3 (0,28)	
3" x 3" x 1/4" (75 x 75 x 6 mm)	28 (2,60)	19 (1,77)	14 (1,30)	9 (0,84)	7 (0,65)	5 (0,46)	
4-1/4" x 4-1/4" x 1/4" (108 x 108 x 6 mm)	40 (3,72)	27 (2,51)	20 (1,86)	13 (1,21)	10 (0,93)	8 (0,74)	
4" x 8" x 1/2" (100 x 200 x 12 mm)	25 (2,32)	17 (1,58)	13 (1,21)	8 (0,74)	6 (0,56)	5 (0,46)	
6" x 6" x 1/4" (150 x 150 x 6 mm)	57 (5,30)	38 (3,53)	28 (2,60)	19 (1,77)	14 (1,30)	11 (1,02)	
6" x 6" x 1/2" (150 x 150 x 12 mm)	29 (2,69)	19 (1,77)	14 (1,30)	9 (0,84)	7 (0,65)	6 (0,56)	
8" x 8" x 3/8" (200 x 200 x 10 mm)	51 (4,74)	34 (3,16)	25 (2,32)	17 (1,58)	12 (1,11)	10 (0,93)	
12" x 12" x 3/8" (300 x 300 x 10 mm)	77 (7,15)	51 (4,74)	38 (3,53)	25 (2,32)	19 (1,77)	15 (1,39)	
13" x 13" x 3/8" (330 x 330 x 10 mm)	83 (7,71)	55 (5,11)	41 (3,81)	27 (2,51)	20 (1,86)	16 (1,49)	
16" x 16" x 3/8" (406 x 406 x 10 mm)	102 (9,48)	68 (6,32)	51 (4,74)	34 (3,16)	25 (2,32)	20 (1,86)	
18" x 18" x 3/8" (457 x 457 x 10 mm)	115 (10,7)	77 (7,15)	58 (5,39)	38 (3,53)	28 (2,60)	23 (2,14)	
20" x 20" x 3/8" (508 x 508 x 10 mm)	128 (11,9)	85 (7,90)	64 (5,95)	42 (3,90)	32 (2,97)	25 (2,32)	
24" x 24" x 3/8" (610 x 610 x 10 mm)	154 (14,3)	102 (9,48)	77 (7,15)	51 (4,74)	38 (3,53)	30 (2,79)	

For 10-lb. (4,54-kg) bag. Coverages in sq. ft. (m²).							
Tile Size	Grout Joint Width						
Tile Size	1/8" (3 mm)	3/16" (4,5 mm)	1/4" (6 mm)	3/8" (10 mm)	1/2" (12 mm)	5/8" (16 mm)	
1" x 1" x 1/4" (25 x 25 x 6 mm)	18 (1,67)	12 (1,11)	9 (0,84)	5 (0,46)	4 (0,37)	3 (0,28)	
2" x 2" x 1/4" (50 x 50 x 6 mm)	37 (3,44)	25 (2,32)	18 (1,67)	12 (1,11)	9 (0,84)	7 (0,65)	
3" x 3" x 1/4" (75 x 75 x 6 mm)	57 (5,30)	37 (3,44)	28 (2,60)	18 (1,67)	13 (1,21)	11 (1,02)	
4-1/4" x 4-1/4" x 1/4" (108 x 108 x 6 mm)	81 (7,53)	53 (4,92)	40 (3,72)	26 (2,42)	19 (1,77)	15 (1,39)	
4" x 8" x 1/2" (100 x 200 x 12 mm)	51 (4,74)	34 (3,16)	25 (2,32)	17 (1,58)	12 (1,11)	10 (0,93)	
6" x 6" x 1/4" (150 x 150 x 6 mm)	114 (10,6)	76 (7,06)	57 (5,30)	37 (3,44)	28 (2,60)	22 (2,04)	
6" x 6" x 1/2" (150 x 150 x 12 mm)	57 (5,30)	38 (3,53)	28 (2,60)	19 (1,77)	14 (1,30)	11 (1,02)	
8" x 8" x 3/8" (200 x 200 x 10 mm)	102 (9,48)	68 (6,32)	51 (4,74)	33 (3,07)	25 (2,32)	20 (1,86)	
12" x 12" x 3/8" (300 x 300 x 10 mm)	153 (14,2)	101 (9,38)	76 (7,06)	51 (4,74)	38 (3,53)	30 (2,79)	
13" x 13" x 3/8" (330 x 330 x 10 mm)	166 (15,4)	110 (10,2)	83 (7,71)	55 (5,11)	41 (3,81)	33 (3,07)	
16" x 16" x 3/8" (406 x 406 x 10 mm)	204 (19,0)	136 (12,6)	102 (9,48)	68 (6,32)	51 (4,74)	40 (3,72)	
18" x 18" x 3/8" (457 x 457 x 10 mm)	230 (21,4)	153 (14,2)	115 (10,7)	76 (7,06)	57 (5,30)	45 (4,18)	
20" x 20" x 3/8" (508 x 508 x 10 mm)	256 (23,8)	170 (15,8)	128 (11,9)	85 (7,90)	63 (5,85)	51 (4,74)	
24" x 24" x 3/8" (610 x 610 x 10 mm)	307 (28,5)	204 (19,0)	153 (14,2)	102 (9,48)	76 (7,06)	61 (5,67)	

<sup>\*</sup> Tile dimensions are width/length/thickness. Coverages shown are for estimating purposes only. Actual job-site coverages may vary according to tile size and thickness, exact joint width, job conditions and grouting methods. For more precise coverages or for coverages not shown here, contact MAPEI's Technical Services Department or use the grout calculator at www.mapei.com.

# **APPROXIMATE COVERAGES\***

For 25-lb. (11,3-kg) bag. Coverages in sq. ft. (m²).							
Tile Size	Grout Joint Width						
Tile Size	1/8" (3 mm)	3/16" (4,5 mm)	1/4" (6 mm)	3/8" (10 mm)	1/2" (12 mm)	5/8" (16 mm)	
1" x 1" x 1/4" (25 x 25 x 6 mm)	45 (4,18)	29 (2,69)	22 (2,04)	14 (1,30)	10 (0,93)	7 (0,65)	
2" x 2" x 1/4" (50 x 50 x 6 mm)	93 (8,64)	61 (5,67)	45 (4,18)	29 (2,69)	22 (2,04)	17 (1,58)	
3" x 3" x 1/4" (75 x 75 x 6 mm)	142 (13,2)	93 (8,64)	69 (6,41)	45 (4,18)	33 (3,07)	26 (2,42)	
4-1/4" x 4-1/4" x 1/4" (108 x 108 x 6 mm)	202 (18,8)	134 (12,4)	99 (9,20)	65 (6,04)	48 (4,46)	38 (3,53)	
4" x 8" x 1/2" (100 x 200 x 12 mm)	127 (11,8)	84 (7,80)	63 (5,85)	42 (3,90)	31 (2,88)	25 (2,32)	
6" x 6" x 1/4" (150 x 150 x 6 mm)	285 (26,5)	190 (17,7)	142 (13,2)	93 (8,64)	69 (6,41)	55 (5,11)	
6" x 6" x 1/2" (150 x 150 x 12 mm)	143 (13,3)	95 (8,83)	71 (6,60)	47 (4,37)	35 (3,25)	28 (2,60)	
8" x 8" x 3/8" (200 x 200 x 10 mm)	255 (23,7)	169 (15,7)	126 (11,7)	84 (7,80)	62 (5,76)	50 (4,65)	
12" x 12" x 3/8" (300 x 300 x 10 mm)	383 (35,6)	253 (23,5)	191 (17,7)	126 (11,7)	94 (8,73)	75 (6,97)	
13" x 13" x 3/8" (330 x 330 x 10 mm)	415 (38,6)	275 (25,5)	207 (19,2)	137 (12,7)	102 (9,48)	82 (7,62)	
16" x 16" x 3/8" (406 x 406 x 10 mm)	510 (47,4)	340 (31,6)	255 (23,7)	169 (15,7)	126 (11,7)	101 (9,38)	
18" x 18" x 3/8" (457 x 457 x 10 mm)	575 (53,4)	383 (35,6)	288 (26,8)	191 (17,7)	142 (13,2)	114 (10,6)	
20" x 20" x 3/8" (508 x 508 x 10 mm)	640 (59,5)	425 (39,5)	320 (29,7)	212 (19,7)	159 (14,8)	126 (11,7)	
24" x 24" x 3/8" (610 x 610 x 10 mm)	768 (71,3)	510 (47,4)	383 (35,6)	255 (23,7)	191 (17,7)	152 (14,1)	

For 50-lb. (22,7-kg) bag. Coverages in sq. ft. (m²).							
Tile Cire	Grout Joint Width						
Tile Size	1/8" (3 mm)	3/16" (4,5 mm)	1/4" (6 mm)	3/8" (10 mm)	1/2" (12 mm)	5/8" (16 mm)	
1" x 1" x 1/4" (25 x 25 x 6 mm)	91 (8,45)	59 (5,48)	43 (3,99)	27 (2,51)	19 (1,77)	15 (1,39)	
2" x 2" x 1/4" (50 x 50 x 6 mm)	187 (17,4)	123 (11,4)	91 (8,45)	59 (5,48)	43 (3,99)	34 (3,16)	
3" x 3" x 1/4" (75 x 75 x 6 mm)	283 (26,3)	187 (17,4)	139 (12,9)	91 (8,45)	67 (6,22)	53 (4,92)	
4-1/4" x 4-1/4" x 1/4" (108 x 108 x 6 mm)	403 (37,4)	267 (24,8)	199 (18,5)	131 (12,2)	97 (9,01)	76 (7,06)	
4" x 8" x 1/2" (100 x 200 x 12 mm)	254 (23,6)	169 (15,7)	126 (11,7)	83 (7,71)	62 (5,76)	49 (4,55)	
6" x 6" x 1/4" (150 x 150 x 6 mm)	570 (53,0)	379 (35,2)	283 (26,3)	187 (17,4)	139 (12,9)	110 (10,2)	
6" x 6" x 1/2" (150 x 150 x 12 mm)	286 (26,6)	190 (17,7)	142 (13,2)	94 (8,73)	70 (6,50)	55 (5,11)	
8" x 8" x 3/8" (200 x 200 x 10 mm)	510 (47,4)	338 (31,4)	253 (23,5)	167 (15,5)	125 (11,6)	99 (9,20)	
12" x 12" x 3/8" (300 x 300 x 10 mm)	765 (71,1)	505 (46,9)	381 (35,4)	253 (23,5)	189 (17,6)	150 (13,9)	
13" x 13" x 3/8" (330 x 330 x 10 mm)	830 (77,1)	550 (51,1)	413 (38,4)	274 (25,5)	205 (19,0)	163 (15,1)	
16" x 16" x 3/8" (406 x 406 x 10 mm)	1020 (94,8)	680 (63,2)	510 (47,4)	338 (31,4)	253 (23,5)	202 (18,8)	
18" x 18" x 3/8" (457 x 457 x 10 mm)	1150 (107)	765 (71,1)	575 (53,4)	381 (35,4)	285 (26,5)	227 (21,1)	
20" x 20" x 3/8" (508 x 508 x 10 mm)	1280 (119)	850 (79,0)	640 (59,5)	424 (39,4)	317 (29,5)	253 (23,5)	
24" x 24" x 3/8" (610 x 610 x 10 mm)	1535 (143)	1020 (94,8)	765 (71,1)	510 (47,4)	381 (35,4)	304 (28,2)	

<sup>\*</sup> Tile dimensions are width/length/thickness. Coverages shown are for estimating purposes only. Actual job-site coverages may vary according to tile size and thickness, exact joint width, job conditions and grouting methods. For more precise coverages or for coverages not shown here, contact MAPEI's Technical Services Department or use the grout calculator at www.mapei.com.















For the most current product and warranty data, visit www.mapei.com.

# GROUT MAINTENANCE

MAPEI grout products are produced to the highest quality of standards. To maintain a clean tile surface, use a neutral-pH cleaner for the floor maintenance, followed by a cleanwater rinse.

Do not use harsh chemicals 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.

### **NOTICE**

Before using, user shall determine the suitability of the product for its intended use and user alone assumes all risks and liability whatsoever in connection therewith. 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.

#### MAPEI

# **Headquarters of the Americas**

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#### **Customer Service**

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

#### **Technical Services**

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

### Additional Information

Website: www.mapei.com

# MAPEI - USA

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