

# DEKOGROUT-3K

Patented, three-component epoxy grout. Available in 52 colours. Offering durability, stain protection, resistance to mould and microorganisms.

## **ADVANTAGES**

- Non-absorbent
- Equipped with anti-microbial technology
- Stain, mould and acid resistant
- 52 colour options available + 5 additional sparkle finish options with dazzle component
- For interior, exterior and submerged applications
- Easy to maintain and clean to the original colour
- Uniform colour no blotchiness or shading
- Tough, durable and crack resistant
- Resistant to chemical and mechanical loads
- Does not require sealing
- Suitable for large format tiles and slabs
- For joints from 1 12 mm wide
- Suitable for heated floors and walls
- Resistant to freeze/thaw cycles

# APPLICATION ADVANTAGES

- Odourless, extraordinary ease of use
- Easy to remove excess product during application due to unique composition
- Extended workability 80 minutes working time at 21°C
- $\bullet$  Ideal for installations at wide temperature ranges; application temperature from 10°C to 35°C

Certificates • EN 13888 RG, ANSI A118.3-1999 • GREENGUARD

# **TECHNICAL FEATURES:**

DEKOGROUT-3K is a patented, high performance grout formulated with epoxy resin, selected quartzes and special additives, suitable to grout all types of ceramic floorings and coverings onto a wide variety of substrates, waterproof and resistant to chemical and mechanical loads. Designed to harden rapidly and without shrinking, easy to use and to clean with water, DEKOGROUT-3K is waterproof, non-absorbent, acid, stain, bacteria and mould resistant. It guarantees a resistance to aging and a cleanliness of the joint that cannot be obtained with traditional grouts. DEKOGROUT-3 K is available in 52 colours plus a clear version which can be enriched with coloured dazzles to give a "metallic" effect to enhance the beauty of the covering.

## AREAS OF APPLICATION:

Can be used to grout joints from 1 to 12 mm wide on tiled floors and walls in: bathrooms, showers, saunas, spas, swimming pools (even with salt water), laboratory benches, kitchen counters, hospitals or where a grout with colour uniformity, hygiene, durability and ease of cleaning is needed.



TECHNICAL

ASSISTANCE







# **CONTRACT ITEM SPECIFICATIONS:**

Floor and wall coverings must be grouted with an epoxy, antibacterial, flexible, mould resistant, water-repellent, three components grout certified and tested in accordance with EN 13888 class RG, ANSI A118.3-1999, GREENGUARD, like DEKOGROUT-3K by Benfer.





# TOOLS AND PRODUCTS FOR AN EXCELLENT WORKABILITY OF DEKOGROUT-3K:

- DEKOGROUT-3K non-absorbent, three-component, epoxy grout, acid, bacteria, stain and mould resistant.
- Hard rubber grout float for an accurate filling of the grout into the joints.
- DEKOSPONGE Synthetic sponge, particularly soft for the accurate cleaning of the fresh product. Consider a consumption approximately of 1 sponge every 4m<sup>2</sup> for the application of mosaic, and 1 sponge every 15m<sup>2</sup> for big porcelain slabs.
- DEKOFELT mildly abrasive felt, for final cleaning after the grout is cured and within 24 hours from the application. This action could be necessary to remove completely small grout particles from tiles with an anti-slip or textured surface.
- 3KCLEANING KIT specific cleaner for epoxy grout, alkali based to be used for the final cleaning.
- Almost two clean water buckets.

#### METHOD OF USE:

Epoxy grout should be cleaned shortly after the application to get best results. We recommend at least two people, who, at the same time, can fill the joints and clean the grout excess.

# **ENVIRONMENTAL CONDITIONS:**

To execute a good work with DEKOGROUT-3K temperature is very important; it has a great influence on workability of the product and on the waiting time before walk on the floor; For this reason, during the application of the system, the temperature must be between 10° and 35°C. Protect the surfaces from strong sunlight, airflows, strong wind and high relative humidity. In any case, we recommend to stock DEKOGROUT-3K at a temperature between 15° and 25°C during 24 hours before use. This expedient improves the workability, reducing fatigue during application.



	4°C	21°C	35°C
Working Time	120 min	80 min	30 min
Tack Free Time	12 hours	4 hours	2 hours
Ready for light foot traffic	24 hours	12 hours	6 hours
Ready for heavy foot traffic	48 hours	24 hours	12 hours
Stain resistance, food spills, household cleaners	14 days	7 days	2 days
Full cure	28 days	14 days	7 days

# SUBSTRATE PREPARATION:

The supports must be fixed and incapable of being deformed, not free to move except for fluctuations and elastic vibrations typical of the structures. Drywalls and thin prefabricated boards are not suitable as supports. Joints must be cleaned thoroughly before grout application from any adhesive residual and the surface must be free from any trace of dust, oil or anti-adhesive substances. Furthermore, it is essential that the adhesive used for application is dry (see times declared by the manufacturer in the technical data sheets).

For Benfer adhesives, respect the following waiting times (at + 23°C, 50% relative humidity): NORMAL SETTING ADHESIVE: 12 hours.

RAPID SETTING ADHESIVE: 3 hours.

Pay particular attention to the grouting of polished ceramic tiles, because the surface is usually more absorbent than it should be and can be stained by grouts in general. In this situation, we recommend protecting the tile surface with specific products before grouting. To be sure of best results, make a test on a small surface first.

# PREPARATION OF THE MIXTURE:

DEKOGROUT-3K is available in 5,28 kg buckets, containing:

- Component A white paste 0,60 kg
- Component B dense yellow liquid 0,60 kg
- Component C coloured quartz sand 4,080 kg

Open Component A and pour all the content in the kit bucket. Follow the same method with Component B. Mix A and B with clean, dry tools scraping the edges and bottom of the bucket with a trowel until a homogeneous soft paste has formed. Once A and B are mixed, add component C, mix using an electric driller, scraping the edges and bottom of the bucket with a trowel several times, until the homogeneous mix is lump free.

A low speed electric driller and a helix (diameter lower than 9 cm), high resistant stainless-steel tool is recommended.



Component C (made of quartz sand of the selected colour) should usually be used in full, but if a more fluid consistency is needed it is possible to mix just 90% of the box content (app. 3,70 kg). This could be when grouting very narrow joints or at a low temperature.

# DEKOGROUT-3K plus DAZZLE:

After mixing Component A and B, gradually pour in the full 4 DAZZLE packs content and continue to mix. Fill the empty DAZZLE pack with Component C, then add this component and mix as per advised method. During the mixing, the application and sponge-cleaning operations, always use protective gloves and glasses as Component B can irritate the skin. It is not permitted to add anything else to the mix because the product will be damaged and altered.

# **DEKOGROUT-3K APPLICATION:**

Spread DEKOGROUT-3K with a hard rubber grout float, exerting reasonable pressure, so that the product will penetrate deeply, then accurately remove the grout excess with a rubber float in a diagonal way. Prepare two containers with lukewarm clean water and wait 10-20 minutes before dipping DEKOSPONGE into the water, then squeeze it onto the tiles and emulsify the residual grout on the tile surface with circular movements. Then, remove residual emulsified material with DEKOSPONGE in a diagonal way. Use both sponge sides and rinse frequently and regularly change the water. Avoid walking on the floor for 24 hours to allow the grout to cure and prevent any staining on the tiles.

## FINAL CLEANING:

To carry out the best job possible, it is important to clean the tile surface within 10-20 minutes (at 23 °C), as previously described, as the product would be fully cured and it would then only be possible to remove mechanically.

For this purpose, DEKOGROUT-3K CLEANING KIT (optional) is available and should be used as follows:

Clean 10-20 minutes after grout application (at 23°C). Add initial cleaning additive to 8 litres of clean, lukewarm water and mix until completely dissolved. Dip DEKOSPONGE into the water, squeeze it onto the tiles and emulsify the residual grout on the tile surface with circular movements. Afterwards remove residual emulsified material with DEKOSPONGE in a diagonal way. Use both sponge sides rinse frequently.

# FINAL CLEANING:

Begin final clean one hour after finishing initial clean. Add final cleaning additive to 8 litres of clean, lukewarm water and mix until complete dissolved. Dip DEKOFELT into the liquid and use it onto the tile surface with circular movements to remove any trace of residual grout. Rinse DEKOFELT frequently and once finished, clean again with fresh sponge and water.

## **FULL SERVICE:**

The full service of the finished floor depends on the weather conditions. Consider a temperature of 23°C (ideal value of an easy application) the time of walkability is 24 hours, while at 15°C is 36 hours. Before the full service verify that the product inside the joints has hardened completely.



### ADVICE:

- Always provide appropriate grout dimensions. The adequate minimum width for floors and tiles indoor is 2 mm, for external floors and walls is 5 mm.
- Although it is more deformable compared to a cementitious grout, DEKOGROUT-3K is not an elastic product and we advise expansion joints every 25m<sup>2</sup>. Outside expansion joints should be every 9m<sup>2</sup> for dark floors and up 12m<sup>2</sup> maximum for light colours, always repeating the fraction joints of the screed on the floor, as well as the structural joints.
- The expansion joints must be filled with DEKOSIL or DEKOFLEX, removing all the material that may affect the adhesion strength before the application.
- During the first 24 hours, always protect the finished and grouted covering from weather agents, such as strong sunlight, wind and rain.
- Protect all the areas which are not to be treated from the effects of DEKOGROUT-3K.
- Due to its granulometry, DEKOGROUT-3K is suitable for sealing joints from 1 mm wide.
- Do not use DEKOGROUT-3K in the presence of water inside the joints, residual cement, oil or dust on the tiles.
- Do not use on unglazed tiles.
- Contact the covering supplier before grout absorbent materials with DEKOGROUT-3K.
- Do not wash DEKOGROUT-3K with acid substances or strong oxidants during application. This may inhibit the hardening process of the material.
- Avoid cleaning water to stand on the freshly made grouts.
- The prolonged contact with acid or oxidant products may modify grout colour.



# DEKOGROUT-3K Chemical resistance:

PRODUCT		PRODUCT SERVICE DESTINATION		
SUBSTANCE	MAX. CON- CENTRATION	LIMITATED CONTACT	OCCASIONAL CONTACT	CONTINUOUS CONTACT
SULFURIC ACID	20%	+	(+)	-
LACTIC ACID	5%	+	+	+
TANNIC ACID	50%	+	+	+
TARTARIC ACID	50%	+	+	+
OXALIC ACID	10%	+	+	+
ACETIC ACID	5%	+	+	+
BENZOIC ACID	5%	+	+	+
FORMIC ACID	3%	+	+	-
CITRIC ACID	5%	+	+	+
POTASSIUM PERMANGANATE	10%	(+)	(+)	(+)
SODIUM HYPOCHLORITE	5%	+	+	-
SODIUM HYDROXIDE	45%	+	+	+
DISTILLED WATER	-	+	+	+
METHANOL	-	+	-	-
ETHANOL	10%	+	+	+
ETHANOL	96%	+	+	-
ISOPROPANOL	-	+	+	+
MEK	-	+	-	-
CHLOROFORM	-	-	-	-
METHYLENE CHLORIDE	-	-	-	-
TOLUENE	-	+	+	-
XYLENE	-	+	+	+

LEGENDA:

LIMITATED CONTACT OCCASIONAL CONTACT

CONTINUOUS CONTACT

GOOD RESISTANCE MODERATE RESISTANCE (THE GROUT WILL RESULT STAINED) (+) WEAK RESISTANCE, NOT RECOMMANDED

NOTE: In case of occasional contact at temperature superior of 32°C resistance for continuous contact should be considered.

PROLONGED CONTACT

PROMPT SURFACE CLEANING

FREQUENT SURFACE CLEANING



	DEKOGRO	OUT-3K Colours	
Colours	Art.No.	Colours	Art.No.
44 Bright White	000002425	66 Chestnut Brown	00000245
18 Sauterne	000002426	59 Espresso	000002452
16 Siltstone	000002427	35 Mocha	000002453
85 Almond	000002428	50 Sea Glass	000002454
O3 Silk	000002429	67 Autumn Green	00000245
23 Antique White	000002430	33 Boston Fern	00000245
39 Mushroom	000002431	14 Moss	000002457
41 Kashmir	000002432	13 Lichen	000002458
81 Butter Cream	000002433	06 Limade	000002459
52 Toasted Almond	000002434	07 Lemonade	000002460
55 Tawny	000002435	04 Artic Blue	00000246
17 Marble Beige	000002436	37 Chambray	00000246
40 Latte	000002437	05 Pastel Blue	00000246
61 Parchment	000002438	32 Turquoise	000002464
30 Sand Beige	000002439	53 Twilight Blue	00000246
56 Desert Khaki	000002440	42 Platinum	000002466
38 River Rock	000002441	91 Slate Grey	000002467
27 Hemp	000002442	88 Silver Shadow	000002468
57 Hot Cocoa	000002443	89 Smoke Grey	000002469
92 Saltillo	000002444	90 Light Pewter	000002470
58 Terra Cotta	000002445	78 Sterling Silver	00000247
46 Quarry Red	000002446	24 Natural Grey	000002472
47 Cinnamon	000002447	34 Sandstone	000002473
36 Copper Beach	000002448	60 Dusty Grey	000002474
08 Cherry Red	000002449	45 Raven	000002473
43 Chocolate Truffle	000002450	22 Midnight Black	00000247

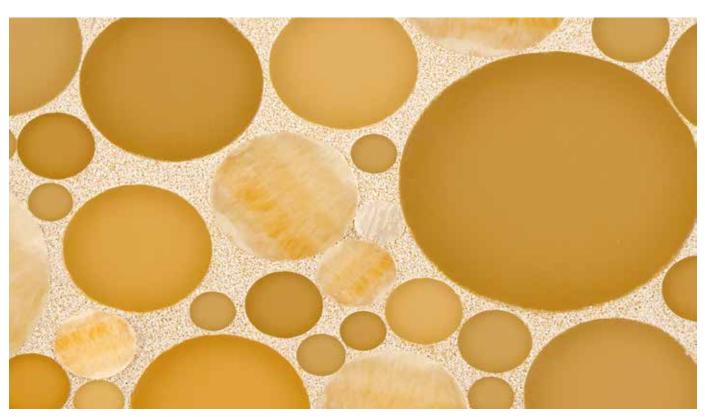
N.B. The colours shown in this chart are reproduced as real as possible, but they are indicative only. They must in any event be verified by the end user, who assumes all liabilities deriving from utilization of the product.

# **DEKOGROUT-3K DAZZLE brilliant effect component**

Component with unique effects, DEKOGROUT-3K DAZZLE enriches with metallic, brilliant effects DEKOGROUT-3K epoxy grout. Unlimited solutions for indoor and outdoor floors and walls.







#### **DEKOGROUT-3K - Coverage table** DEKOGROUT-3K joints 1 to 12 mm wide Coverage: kg per 10 m<sup>2</sup> of tiled surface Size of the tile (cm) Joint width (cm) Thickness (mm) width 0,1 0,2 0,4 0,6 0,8 1,2 length 2,5 5,90 2,5 0,4 11,8 2,5 2,5 1,0 29,6 59,2 14,8 5 5 0,4 2,95 5,90 11,8 17,8 23,7 29,6 35,5 10 10 0,8 2,95 5,90 11,8 17,8 23,7 29,6 35,5 10 0,8 13,3 17,8 22,2 20 2,20 4,45 8,85 26,6 15 15,8 19,7 15 0,8 1,95 3,95 7,80 11,8 23,7 15 15 1,4 3,45 6,90 13,8 20,7 27,6 34,5 41,4 11,5 1,2 2,85 5,70 17,1 22,8 28,6 34,3 24 11,4 20 20 0,8 1,45 2,95 5,90 8,85 11,8 14,8 17,8 5,90 7,90 30 30 0,8 1,00 1,95 3,95 9,85 11,8 0,90 8,95 33 33 0,8 1,80 3,60 5,35 7,15 10,8 40 40 0,8 0,75 1,45 2,95 4,45 5,90 7,40 8,90 60 30 0,8 0,75 1,45 2,95 4,45 5,90 7,40 8,90 60 60 0,50 1,00 1,95 2,95 3,95 4,95 5,90 0,8 120 60 0,75 2,95 3,70 0,8 0,35 1,45 2,20 4,45 120 120 0,5 0,25 0,50 1,00 1,50 2,00 2,50 2,95 360 120 0,5 0,10 0,20 0,40 0,60 0,80 1,00 1,20

PLEASE NOTE: the consumption given in this chart is based on our best experience and is indicative only. It must be verified by the final user.



Part C: powder

PACKS: DEKOGROUT-3K is available in 5,28 kg buckets.

DAZZLES are available in 180 grams jar.

STORAGE: In a dry place, in the original closed package; open bags must be closed again and

used as soon as possible. SHELF LIFE: 24 months.

#### PRODUCT TECHNICAL DATA

Consistency: Specific weight:

Danger of toxicity:

Inflammable:

Mixture ratio: Mixing time:

Consistency of paste:

Application temperature: Largeness of application:

Humidity resistance: Aging process resistance:

Resistance to temperature: Storage and Duration:

Part A: Dense liquid

**Part A:** 1,1 kg/dm<sup>3</sup>.

**Part B:** 1,1 kg/dm<sup>3</sup> **Part C:** 1,6 kg/dm<sup>3</sup> Part A: May cause severe skin burns and eye damage. May cause an allergic

skin reaction. Harmful to aquatic organisms.

Part B: Dense liquid

Part B: May cause skin irritation and severe eye irritation. May cause an allergic skin reaction.

Part C: May cause eye irritation.

Part A: Part B: Part C: = 11,1:11,1:77,8 2 - 3 minutes (mixer . 300 - 500 r/min)

doughy

from  $+ 10^{\circ}\text{C}$  to  $+ 35^{\circ}\text{C}$ from 1 mm to 12 mm

excellent excellent

From - 20°C to + 100°C

24 months in a dry place, in the original closed package; open bags must be closed again and used as soon as possible.

PLEASE NOTE: The information given in this chart is based on our best experience and indicative only. It must in any event be verified by the end user, who assumes all liabilities deriving from utilization of the product.

