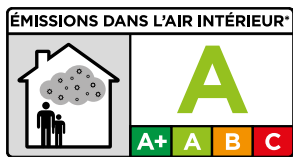




DEKOGROUT-2K

Two part non absorbent waterproof adhesive-grouting mixture. Igienic, acid, stain, bacteria and mould resistant. Beautiful finish, easy to apply, low consumption

- Antibacterial and mould resistant
- Perfect for rectified tiles
- Water repellent
- Resistant to freeze/thaw cycles
- Good application and wash-off properties
- Smooth surface and wide colour range (26 colours)
- Resistant to chemical and mechanical loads
- For interior, exterior and under water
- Fulfils the requirements of EN 13888, RG and EN12004 R2T
- For joints from 1 -10 mm wide
- Suitable for floor and wall heating
- Colours matched to the DEKOSIL silicone system
- **CE**



TECHNICAL FEATURES: DEKOGROUT-2K is a special two part product with an epoxy resin base, selected quartzes and special additives suitable for laying and grouting all types of ceramic floorings and coverings onto a wide variety of bases, waterproof and resistant to chemical and mechanical loads. Designed to harden rapidly and without shrinking, easy to use and clean with water, DEKOGROUT-2K is waterproof, non-absorbent, acid, stain, bacteria and mould resistant. It guarantees an aspect and a resistance to aging and a cleanliness of the joint that can not be obtained with traditional grouts. DEKOGROUT-2K is available in 26 colours plus a clear version which can be enriched with coloured glitter to give a "metallic" effect to enhance the beauty of the covering.

AREAS OF APPLICATION: Fixing all types of glass mosaic and tiles and making all types of joint from 1 to 10 mm wide on tiled floors and covers (except for absorbent surfaces) in: bathrooms, showers, saunas, spas, thermal centres, swimming pools (even with see water), laboratory benches, kitchen benches, hospitals, everywhere you want to accomplish a coating with some features of higher duration, cleaning facility and beauty.

CONTRACT ITEM SPECIFICATIONS: Floor and wall coverings must be applied and grouted with a epoxy, antibacterial, flexible, mould resistant, water-repellent adhesive/grout certified and tested in accordance with EN 13888 class RG and EN 12004 class R2T with deformation higher than 10 mm like DEKOGROUT-2K by Benfer.



TECHNICAL ASSISTANCE



INSURANCE GUARANTEE



TECHNICAL MEETINGS



PROFESSIONAL USE

Tools and products for an excellent workability of DEKOGROUT-2K:

- **DEKOGROUT-2K** non-absorbent, two components, adhesive-grout, acid, bacteria, stain and mould resistant.
- **Hard rubber grout float** for an accurate filling of sealant into the joints. We recommend exerting a reasonable pressure, so that the product will penetrate deeply in empty spaces. The hard spatula allows the filling at the tile level, avoiding the unpleasant effect of voiding the joints.
- **DEKOFELT** mildly abrasive felt, used to emulsify the grout before cleaning with a sponge. Consider a consumption approximately of 1 felt every 4 m² for the application of mosaic, and 1 felt every 15 m² for gres in big format. **DEKOSPONGE**: sponge in cellulose, particularly soft for the accurate cleaning of the fresh product. Consider a consumption approximately of 1 sponge every 4 m² for the application of mosaic, and 1 sponge every 15 m² for gres in big format.
- **2K-CLEANER** is a specific cleaner for alkali based, epoxy grout.

METHOD OF USE:

Before starting:

Epoxy joint should be cleaned in short time before the application to get an excellent result. For this reason we recommend to consider at least two persons, who, at the same time, can grout the joints and clean the grout excess with felt and sponge.

Environmental conditions:

To execute a good work with DEKOGROUT-2K temperature is very important; it has a great influence on the times of workability of the product and on the times of crossing on the floor; For this reason, during the application of the system, the temperature must be between 12° and 30°C. Protect the surfaces from strong sunlight, airflows, strong wind and high relative humidity. In any case, we recommend to stock DEKOGROUT-2K at a temperature between 15° and 25°C during 24 hours before use. This expedient improves the workability, reducing fatigue during application.

PREPARATION OF THE MIXTURE:

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. Grouted joints must be cleaned accurately before de application and the residual cement on the whole thickness of the tile and the surface must be free from any trace of dust, oil or anti-adhesive substances.

Furthermore, it is essential that grouts and mortars used for application are dry (see times declared by the producer in the technical data sheets).

For adhesives of the brand Benfer, respect the following waiting times (at + 23°C, 50% relative humidity):

NORMAL SETTING ADHESIVE : 12 hour

RAPID SETTING ADHESIVE: 3 hours.

Pay particular attention to the grouting of ceramic material, especially polished, because the superficial glazing can be removed and resulting more absorbent to grouts in general. We recommend to protect the surfaces with specific products before the grouting. For any doubt, make a test on a small surface before proceeding, and consult the supplier before starting to work, anyway.

PREPARATION OF THE MIXTURE:

DEKOGROUT-2K is available in 2,5 kg and 5 kg bucket that contains 2 pastes, that are pre-dosed in the right ratio, to be mixed entirely in the original packing with clean and dry tools, until you obtain a homogeneous paste, using, in case, a spatula to scrape from the bucket the material that was not perfectly mixed. We recommend to use a low-rev electric mixer and a highly resistant tool (better if made of steel) with a helix with a diameter lower than 9 cm. It is absolutely forbidden to add water to the product, from which it would be irremediably damaged. When opting for the clear version with glitter, after having thoroughly mixed part A with part B, slowly pour all the contents of the glitter pack continuing to mix and using a spatula to scrape the product from the sides of the container until the perfect result is obtained. During the mixing, the setting and the sponge-cleaning operations, always use protective gloves and glasses, because paste B is irritant for the skin.

APPLICATION OF DEKOGROUT-2K AS A GROUT:

Spread DEKOGROUT-2K with a hard rubber grout float by exerting a reasonable pressure, so that the product will penetrate deeply, then remove accurately the excess grouting parts with rubber grout float in diagonal way. In the meantime the second worker will start immediately the cleaning process. Prepare two containers with lukewarm clean water, apt for this purpose. Squeeze DEKOFELT, a medium-hard felt, imbued of water, on the tiles and emulsify the grout with circular movements. It is necessary to rinse frequently the felt to remove the excess grouting parts and to add water on the treated surfaces. Finally remove residual material with DEKOSPONGE, soft sponge in cellulose, to be rinsed frequently in fresh water. We recommend to use the sponge moving it on joints at 45°C to avoid the removal of grout as much as possible.

Cleaning after application:

To execute a good work it is very important to clean within few minutes after grouting because, as explained before, because if you delay too long, the cleaning operation would become too difficult. Subsequently, do not walk on the fresh floor for 24 hours to avoid to drag under the shoes the fresh product (still not dry) all over the surface. An accurate cleaning operation after application is recommended anyway, in particular the day after, even following the really first cleaning. Apply DEKOGROUT-2K CLEANER all over the tile floor and leave it for about 15 minutes. Then emulsify the product with DEKOFELT, a medium-hard felt, and clean the floor with a soft dry cloth. With this operation all the residual excess, even the most impalpable, will be removed.

APPLICATION OF DEKOGROUT-2K AS ADHESIVE:

Spread DEKOGROUT-2K with a notched metallic spatula, suitable for the tiles to lay. In interiors, apply the tiles by exerting a reasonable pressure, so that the contact with the adhesive will be, at least 80% of the wall surface; at least 95-100% for floor tiles. In exterior, in damp areas or inside tanks, the contact with the adhesive must be 100%. At 23°C the open time is about 50 minutes and the duration of the mixture in the bucket is about 45 minutes.

In adverse conditions (with extremely high room temperature, ex. : 30°C), the cited periods of time may be considerably reduced; in this case, we recommend the use of the product within 30 minutes, applying gradually and avoiding the application when the product results too dense or thick inside the bucket. Floors created with DEKOGROUT-2K can be walked by with caution after about 24 hours for grouting, completely walkable after 4 days in presence of temperature of 23°C. In case of temperature lower than 15°C we discourage the application.

FULL SERVICE:

The full service of the finished floor depends on the weather conditions. Consider that at 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 if the product inside the joints has hardened completely.





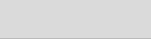
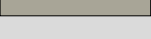


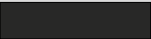
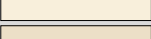
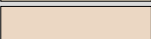

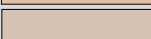






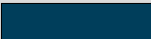



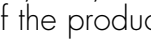







ADVICE:

- Always provide a grout of proper dimensions. The adequate minimum width for floors and tiles in interiors is 2 mm, for external floors and walls is 5 mm.
- Although it is more deformable compared to a cementitious grout, DEKOGROUT-2K is not an elastic product, so, in floors in interior areas, you need to consider expansion joints every 25 m² and 9 m² for floors in dark colors, up to maximum 12 m² for light colors, always repeating the fraction joints of the screed on the floor, as well as the structural joints.
- The expansion joints must be filled with silicone DEKOSIL or a polyurethane sealant 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, rain etc...
- Protect all the areas which are not to be treated from the effects of DEKOGROUT-2K.
- Due to its granulometry, DEKOGROUT-2K is suitable for sealing joints from 1 mm wide.
- Do not use DEKOGROUT-2K in presence of water inside the joints, with residual cement, oil or dust on the tiles.
- Do not use dark colors on Klinker which is not glazed.
- Contact the supplier before starting to work with the grouting absorbent materials with DEKOGROUT-2K.
- Do not wash DEKOGROUT-2K with acid substances or strong oxidants during application. This may inhibit the hardening process of the material.
- Avoid standing cleaning water on the freshly made grouts.
- The prolonged contact with acid or oxidant products may modify the color of grouting.

Chemical resistance of ceramic walls grouted with DEKOGROUT-2K:

PRODUCT			INTENDED USE		
INDUSTRIAL FLOORS					
GROUP	NAME	CONCENTRATION	CONTINUOUS CONTACT 20°C	OCCASIONAL CONTACT 20°C	
ACIDS	Acetic	2,5%	+	+	
		5%	(+)	+	
		10%	-	-	
		Chloric	37%	(+)	+
		Chromic	20%	-	-
		Citric	10%	-	-
		Formic	2,5%	+	+
			10%	-	-
		Lactic	2,5%	+	+
			5%	(+)	+
			10%	-	(+)
		Nitric	25%	(+)	+
			50%	-	-
		Oleic		-	-
		Phosphoric	50%	(+)	+
	75%		-	-	
	Sulphoric	1,5%	+	+	
		50%	(+)	+	
		98%	-	-	
	Tannic	10%	(+)	+	
	Tartaric	10%	+	+	
	Oxalic	10%	+	+	
ALKALIS AND SATURATED SOLUTION	Ammonia	25%	+	+	
	Sodium Hydroxide	50%	+	+	
	Potassium Hydroxide	50%	+	+	
	Hypochlorite		(+)	+	
	Active chlorine	6,5 g/l	-	-	
	Active chlorine	162 g/l			
SATURATED SOLUTION	Sodium thiosulphate		+	+	
	Sodium chloride		+	+	
	Calcium chloride		+	+	
	Iron chloride		+	+	
	Aluminium Sulphate		+	+	
	Sugar		+	+	
	Hydrogen Peroxide	1%	+	+	
		10%	+	+	
	Sodium bisulphate		+	+	
OILS AND COMBUSTIBLES	Gasoline		+	+	
	Oil		+	+	
	Diesel		+	+	
	Olive oil		+	+	
SOLVENTS	Ethyl alcohol		+	+	
	Acetone		-	-	
	Ethylene Glycol		+	+	
	Glycerine		+	+	
	Perchloroethylene		-	-	
	Trichlorethane		-	-	
	Trichloroethylene		-	-	
	Methylene Chloride		-	-	
	Toluene		-	-	
	Benzol		-	-	
	Xylol		-	-	

KEY : + = -EXCELLENT RESISTANCE (+) = DECENT RESISTANCE - = POOR RESISTANCE

DEKOGROUT-2K Colours					
Colour	Art. no	Colour	Code	Package kg	Package/Europallet
	000001550	White	White	2,5 kg bucket	80 buckets/ europallet
	000001551	White	White	5 kg bucket	40 buckets/ europallet
	000001580	Manhattan	Manhattan	2,5 kg bucket	40 buckets/ europallet
	000001552	Grey chiaro	7035	2,5 kg bucket	80 buckets/ europallet
	000001553	Grey chiaro	7035	5 kg bucket	40 buckets/ europallet
	000001554	Grey	7042	2,5 kg bucket	80 buckets/ europallet
	000001555	Grey	7042	5 kg bucket	40 buckets/ europallet
	000001556	Grey tortora	Grey tortora	2,5 kg bucket	80 buckets/ europallet
	000001557	Grey tortora	Grey tortora	5 kg bucket	40 buckets/ europallet
	000001558	Grey cemento	7030	2,5 kg bucket	80 buckets/ europallet
	000001559	Grey cemento	7030	5 kg bucket	40 buckets/ europallet
	000001560	Antracite	7037	2,5 kg bucket	80 buckets/ europallet
	000001561	Nero	9004	2,5 kg bucket	80 buckets/ europallet
	000001562	Off white	Off white	2,5 kg bucket	80 buckets/ europallet
	000001563	Crema marfil	9001	2,5 kg bucket	80 buckets/ europallet
	000001564	Travertino	Travertino	2,5 kg bucket	80 buckets/ europallet
	000001565	Beige	1013	2,5 kg bucket	80 buckets/ europallet
	000001566	Camel	1001	2,5 kg bucket	80 buckets/ europallet
	000001581	Nocciola	Nocciola	2,5 kg bucket	80 buckets/ europallet
	000001582	Caramello	Caramello	2,5 kg bucket	80 buckets/ europallet
	000001567	Tabacco	8007	2,5 kg bucket	80 buckets/ europallet
	000001568	Marrone	8011	2,5 kg bucket	80 buckets/ europallet
	000001569	Testa di moro	8017	2,5 kg bucket	80 buckets/ europallet
	000001570	Giallo	1012	2,5 kg bucket	80 buckets/ europallet
	000001571	Verde	6019	2,5 kg bucket	80 buckets/ europallet
	000001572	Smeraldo	6024	2,5 kg bucket	80 buckets/ europallet
	000001573	Crocus	Crocus	2,5 kg bucket	80 buckets/ europallet
	000001574	Azzurro	5012	2,5 kg bucket	80 buckets/ europallet
	000001575	Blu	5013	2,5 kg bucket	80 buckets/ europallet
	000001577	Rosa	3014	2,5 kg bucket	80 buckets/ europallet
	000001578	Rosso maranello	3003	2,5 kg bucket	80 buckets/ europallet

PLEASE NOTE: 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.

CONSUMPTION OF 2K-CLEANER, DEKOFELT AND DEKOSPONGE FOR EACH 10 kg OF DEKOGROUT-2K

SIZE OF THE TILE IN CM	2K-CLEANER (500ml)	DEKOFELT	DEKOSPONGE
2x2	10 pcs.	10 pcs.	8 pcs.
5x5	9 pcs.	9 pcs.	8 pcs.
10x10	8 pcs.	8 pcs.	7 pcs.
10x20	8 pcs.	8 pcs.	6 pcs.
15x15	8 pcs.	8 pcs.	6 pcs.
12x24	8 pcs.	8 pcs.	6 pcs.
20x20	6 pcs.	6 pcs.	5 pcs.
15x30	7 pcs.	7 pcs.	6 pcs.
30x30	5 pcs.	5 pcs.	4 pcs.
15x60	5 pcs.	5 pcs.	4 pcs.
40x40	4 pcs.	4 pcs.	4 pcs.
30x60	4 pcs.	4 pcs.	4 pcs.
45x45	4 pcs.	4 pcs.	4 pcs.
20x120	4 pcs.	4 pcs.	4 pcs.
60x60	3 pcs.	3 pcs.	3 pcs.
90x90	3 pcs.	3 pcs.	3 pcs.
50x150	3 pcs.	3 pcs.	3 pcs.
160x160	2 pcs.	2 pcs.	2 pcs.
100x300	2 pcs.	2 pcs.	2 pcs.

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

DEKOGROUT-2K - Coverage table -

DEKOGROUT-2K for joints from 2 up to 10 mm.
Coverage: kg per 10 m² of tiled surface

Size of the tile (cm)	Thickness (cm)	Width of the joint (mm)							
		2	3	4	5	6	8	10	
1 x 1	0,3	18,4							
2 x 2	0,4	11,5							
2,5 x 2,5	0,4	9,20	13,8						
2,5 x 2,5	1,0	23,6	35,4						
5 x 5	0,4	5,20	7,90	10,5	13,1	15,7	21,0	26,2	
10 x 10	1,0	6,60	9,80	13,1	16,4	19,7	26,2	32,8	
10 x 10	0,6	3,90	5,90	7,90	9,80	11,8	15,7	19,7	
12,5 x 12,5	1,0	5,20	7,90	10,5	13,1	15,7	21,0	26,2	
10 x 20	0,8	3,90	5,90	7,90	9,80	11,8	15,7	19,7	
15 x 15	1,4	6,40	9,60	12,9	16,1	19,3	25,7	32,1	
15 x 15	0,8	3,70	5,50	7,30	9,20	11,0	14,7	18,4	
24 x 11,5	1,2	5,50	8,30	11,0	13,8	16,5	22,0	27,6	
24 x 11,5	2,0	9,20	13,8	18,4	23,0	27,6	36,7	45,9	
20 x 20	1,4	4,60	6,90	9,20	11,5	13,8	18,4	23,0	
20 x 20	0,8	2,60	3,90	5,20	6,60	7,90	10,5	13,1	
20 x 25	0,8	2,40	3,50	4,70	5,90	7,10	9,40	11,8	
25 x 25	1,0	2,60	3,90	5,20	6,60	7,90	10,5	13,1	
25 x 33	1,0	2,60	3,90	5,20	6,60	7,90	10,5	13,1	
30 x 30	1,5	3,90	5,90	7,90	9,80	11,8	15,7	19,7	
30 x 30	0,8	2,10	3,10	4,20	5,20	6,30	8,40	10,5	
30 x 5	1,0	7,90	11,8	15,7	19,7	23,6	31,5	39,4	
33 x 33	0,8	2,10	3,10	4,20	5,20	6,30	8,40	10,5	
40 x 40	1,0	2,00	3,00	3,90	4,90	5,90	7,90	9,80	
30 x 60	1,0	2,00	3,00	3,90	4,90	5,90	7,90	9,80	
60 x 60	1,0	1,30	2,00	2,60	3,30	3,90	5,20	6,60	

CLEANING: The cleaning of coverings has to be done with a damp felt or a sponge before the sealer starts gripping.

CONSUMPTION: See table.

PACKAGING : DEKOGROUT-2K: 2.5 kg and 5 kg buckets.

GOLD and SILVER GLITTER 0.125 kg buckets.

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

Classification:	EN 13888 RG and EN 12004 R2T
Consistency:	Part A: Doughy. Part B: Dense liquid
Colours:	See table
Specific weight:	Part A: 1,65 kg/dm ³ . Part B: 0,95 kg/dm ³
Danger of toxicity:	Part A: The product may cause irritation to the eyes and skin. May cause sensitization. Part B: caustic and toxic for contact with skin, ingestion and inhalation. May cause sensitization
Inflammable:	No
Mixture ratio:	Part A : Part B = 94:6
Mixing time:	2-3 minutes (mixer . 300 - 500 r/min)
Consistency of paste:	Doughy
Mass volume of paste:	1,40 kg/dm ³
Pot life:	45 minutes at + 23°C
Application temperature:	From + 12°C to + 30°C
Largeness of application :	From 1 to 10 mm
Foot traffic after:	After 24 hours
Full service:	After 24 hours
Final hardening:	14 days
Humidity resistance:	Excellent
Aging process resistance:	Excellent
Resistant to oil:	Good
Resistance to chemical agents:	Excellent
Resistance to alkali:	Excellent

Final performance

Shear resistance at start:	> 2,0 N/mm ²
Shear resistance after water immersion:	> 2,0 N/mm ²
Shear strength after thermal shock:	> 2,0 N/mm ²
Deformability according to EN 12004:	> 5 mm
Resistance to temperature:	From - 20°C to + 100°C * at 23°C and 50% relative humidity

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.