

# **FILLGEL PLUS UVR**

### 1 DESCRIPTION

High performance epoxy grout for Bisazza Glass Mosaics, washable with water.

Fillgel Plus is a half-transparent bi-compound epoxy paste, made up of epoxy resins, silica compounds and special additives. It has a high wear resistance, it's easy to apply and to clean with UV resistance.

Once dry and hardened, FILLGEL PLUS UVR has the following characteristics:

- Final surface smooth and compact
- Colors uniform and resistant to variation
- UV resistance
- Resistant to water
- High-hardness and resistant to high traffic
- Free from any cracks and leaks
- Excellent adherence to the mosaic tesserae

The accurate qualitative and granulometry selection of the compounds, allows one to obtain a surface with a particularly shiny and reflective finish.

# 2 APPLICATIONS

To grout Bisazza mosaics on walls and floors.

Suitable for interior and exterior applications.

Suitable for wet and permanent wet areas

Particularly suitable for thermal or salted water pools and in areas where a total hygiene is required.

TECHNICAL CHARACTERISTICS		
	Comp. A: colored paste (see color board)	
Colors	Comp. B: to be mixed at the use	
	Packets for a total of 3 kg.	
Bond nature	Epoxy-polyaminoamidic	
Specific catalyzed weight	eight 1, 05 ± 0,1 kg/dm3	
Catalysis ratio 2:1 in weight		
Temperature of application	From + 15 °C to +30 °C	
Starting cleaning	Within 30 minutes /30°C Within 50 minutes /20°C	
	Within 2 hours /15°C	
Washability with water	Excellent	
Hardening time		
Walking time	After 24 hours, with lower temperatures time is longer*	
Ready for use  After 7 days, with lower temperatures time is longer In pools and humid environments, wait for 14 days.		
		Classification according to EN 13888

<sup>\*</sup>in the meantime, avoid water stagnation.

NOTE: The above data were taken at a temperature of +23°C with 50% humidity. Higher temperatures reduce the above times.



4	FINAL PERFORMANCE		
	Determination of resistance to abrasion	≤ 250 mm <sup>3</sup> UNI EN 12808-2	
	Determination of flexural strength	≥ 30 N/mm <sup>2</sup> UNI EN 12808-3	
	Determination of compressive strength	≥ 45 N/mm <sup>2</sup> UNI EN 12808-3	
	Determination of shrinkage	≤ 1,5 mm/m UNI EN 12808-4	
	Determination of water absorption	≤ 0,1 g UNI EN 12808-5	
	VOC emissions in accordance with the French decree <sup>(1)</sup>	Class A+ (Arreté 2011-321 Annexe I-D)	
	Fungal colonisation (BS 5980)	no visible growth	
	Assessment of the effect of light exposure	Gray scale <sup>(2)</sup> (UNI EN 15187): 4	

<sup>(1)</sup> Information on the emission level in the interior of volatile organic compounds, which present a risk of inhalation toxicity, on a class scale from A + (very low emissions) to C (high emissions).

	5	STORAGE		
Ī		24 months in dry and cool area, in original unopened packaging. The expiry date is printed on the packet.		
		Confezioni	Part "A" and Part "B" to be mixed at the time of use - total 3 Kg.	

# 6 INSTRUCTIONS FOR USE

#### Preparation of the surface

Make sure that the joints are clean and free from any dust or debris; failure to do so will prevent the grout adhesion ie. oils, grease, cement powder, residuals of cement-based adhesives etc.

For a correct sealing of the mosaic with FILLGEL PLUS UVR, the joints must present half of their thickness empty. (Note: if adhesive is above guide indicated remove it prior to grouting). Start grouting with FILLGEL PLUS UVR only when the adhesive used for fixing is completely dry. Never wet the joints before application of the grout FILLGEL PLUS UVR.

#### Preparation of the product

Pour component B in the A component container. Mix for about 1 minute using an electric mixer at low turning number (400-600 rpm), equipped with helicoidally beater to obtain a homogeneous paste. Hand mixing is not recommended.

Scratch with a trowel the walls and bottom of the container in order to avoid traces of products not mixed. Complete the process mixing for further 30". Pour component B in the A component container. Mix for about 1 minute. Pour the mixture in a clean bucket and mix further. Proceed with the application of the grout.

#### Application

Spread FILLGEL PLUS UVR by using a rubber trowel, filling the joints and checking that the bubble of air are completely eliminated. If necessary repeat the operation twice.

Remove immediately the excess of product keeping the trowel almost perpendicular respect to the surface and diagonal respect to the joints, then proceed with the cleaning operations.

### Cleaning

Cleaning must start immediately after the grouting and within 50 minutes (since the mixing of the two compounds) at 23°C. Higher temperatures reduce the time for the cleaning operations.

Emulsify the excess of grout with Bisazza Scrub soaked only with water and keep it clean with frequent rinsing.

For a better execution of this operation we recommend the use of a trowel with "velcro" stripes, with a rotating motion and with a gentle pressing avoiding to empty the joints.

Remove the emulsion with Bisazza Sponge moistened only with water and kept clean with frequent rinsing. Change the scrub and the sponge when they look oily or sticky; usually, every 4/5 sqm.

Avoid to allow the cleaning liquid to penetrate in the joints.

Keep clean the tools with clean water.

After a few hours (no less than 4, and not more than 15 hours), remove possible halos with Bisazza scrub and only water. Any other over grouting can be made when the surface is totally dry.

<sup>(2)</sup> The gray scale is a contrast scale ranging from 1 (maximum contrast) to 5 (no visible variation).



7	AVERAGE CONSUMPTION OF FILLGEL PLUS UVR (Kg/mq)	
	20x20 mm	1,45
	10x10 mm	1,45
	BRICKS 2X5	1,25
	VARIATIONS	1
	VARIATIONS - LINE	1,3
	OPERA 15	2,3
	OPERA 25*	1,6
	5X5*	1
	OPUS ROMANO 12	1,2
	Decorations in artistic technique 10x10 mm	1,0 - 1,45
	Decorations in artistic technique 20x20 mm	1,45

<sup>\* 5</sup>mm notched trowel

The calculations above are based on a professional installation using the correct Bisazza fixing tools and guides.

# 8 REMARKS

- Avoid the use on surfaces subject to permanent contact with oleic acid.
- Respect the split and/or expansion joints sealing them with a specific product.
- FILLGEL PLUS UVR is not a waterproof product.
- Never add to water or any solvent it will compromise the performance of the product.
- Mix well the two compounds (A+B) to avoid altering the performance of the product
- Do not use portions of the product
- Slight shade variations between different batches may occur
- Working time varies according to environmental conditions and substrate
- Do not use the product when the substrate temperature is below +12°C or more than +30°C
- Carefully respect the mixing ration 2:1 in weight
- Wait at least 7 days (at 23°C) from conclusion of fixing works before a contact of the surface with water
- Do not cover the grouted surfaces unless at least 4 days are passed
- In case of applications on heated substrates, the instructions released by the supplier of the heating system have to be followed

### 9 RESISTANCE TO CHEMICAL AGENTS

Evaluation of resistance of Fillgel to chemical solutions. Tests performed according to the norm UNI EN 12808-1.

solutions / conditions	continuous immersion for 28 days	sporadic contact
Hydrochloric acid 1%	++	no change
Sodium hydroxide 2%	+	no change
5 mg/l di Cl <sub>2</sub>	no change	no change
10 mg/l di Cl <sub>2</sub>	+	no change
sodium hypochlorite 15%	+++	++
Hydrogen peroxide 65 mg/l	no change	no change
Hydrogen peroxide 10%	+++	++

### Legend:

- + slight change
- ++ visible change
- +++ strong change



# 10 SAFETY WARNINGS

- Irritant for the eyes, respiratory tracts and skin
- May cause irritation in contact with the skin
- In the event of contact with eyes, wash immediately with plenty of water and consult a doctor.
- Use protective clothing, gloves and goggles
- Use only in well ventilated areas

Read the instructions of the pack and consult the safety data sheet before using.

Safety information is available on a separate document.

Above indications and recommendations are the result of Bisazza long experience, they have to be however considered as merely indications. It is recommended to verify the suitability of the product before its use. The user undertakes any responsibility rising from its use.

ONLY FOR PROFESSIONAL USE