

Fugapox Style Industria 4.0



Two-component, acid-resistant epoxy resin, with high mechanical and chemical resistance; to glue and seal structurally floor and walls in industrial and dwelling estates. Complying with the HACCP system and with the requirements of EC no. 852/2004 regulation on the hygiene of foodstuffs.



Fields of application:

• AS AN ADHESIVE:

For internal and external gluing of floors and walls in any size and thickness, in porcelain stoneware, ceramic, single and double firing, glossy mosaic, ceramic mosaic, natural stones or agglomerates, linoleum and PVC, even with overlapped installation. Suitable for swimming pools, tanks with thermal or salty waters;

• AS SEALANT:

Acid-resistant, waterproof epoxy grouting, for indoors and outdoors joints of floors and walls, from 2 to 20 mm.

Grouting of floors and walls in any size in porcelain stoneware, industrial stoneware, low thickness stoneware, thin stoneware, clinker, single firing, double firing, glossy mosaic, ceramic mosaic, brick glass, natural stones and agglomerates, granites. Grouting resistant to aggressive substances and detergents for household use and in industrial processes.

For grouting surfaces such as exterior façades, balconies, swimming-pools, fountains, bathrooms, saunas, wellness centres, heating floors, highly-trampled premises, masonry kitchens and bathrooms, mildew-resistant groutings.



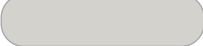

Fugapox Style Industria 4.0 is a two-component epoxy adhesive/sealant with high deformability, class EN 12004 R2TE and EN 13888 class RG. The formulation of **Fugapox Style Industria 4.0** achieves gluing and grouting with high mechanical resistance and dimension stability in joints. The hardness of the product gets installation systems that can be considered structurally joined, a special requisite for industrial field. It can also distribute important loads and insulate the individual tile, absorbing different types of vibrations. The high creaminess improves application and cleanliness, reducing yard times, wasting less material.

Mix **Fugapox Style Industria 4.0** component A with component B with a low revolution number mixer, to get a flexible and homogeneous mix, paying attention to the application temperatures, +12°C to +35°C.

Apply as an adhesive, with a trowel suitable to the size of the tile and, where necessary, the backbuttering according to EN 11493 point 7.9/7.11 can be applied. Apply as a sealant with a plastic squeegee filling the joint and removing any excess product.

Emulsify with water and felt, cleaning the surface with a suitable sponge (SPUGNAPOX) leaving it residue free.

CE	
Opera Srl Via degli Scavi 19/21 47122 Forlì - Italy	
DOP-IT-01-071 FUGAPOX STYLE INDUSTRIA 4.0 EN 12004:2007+A1:2012	
Improved reaction adhesive for installation of ceramic indoors and outdoors, on floors and walls	
Fire reaction:	Class E-E-R1
Adhesion strength:	
- Initial shearing adhesion	≥ 2.0 N/mm ²
Durability:	
- Shearing adhesion after thermal shock	≥ 2.0 N/mm ²
- Shearing adhesion after immersion in water	≥ 2.0 N/mm ²
Release of harmful substances:	See SDS

Characteristics	Application methods	Consumption
Excellent creaminess High chemical and mechanical strength. Waterproof	Notched trowel Rubber squeegee	3.5 – 5 kg/m ²
Excellent adhesion to any surface High cleanliness	Color	Storage
Excellent durability over time High workability	 29 - Silver	Shelf life of 12 months in the original packages at temperatures above +5°C. Do not expose to direct sunlight
	 30 - Cement Grey	

Code	Product	Color	Packages	Pallet
2514030	Fugapox Style Industria 4.0	Cement Grey	10 kg (9,4+0,6)	480 kg
2514029	Fugapox Style Industria 4.0	Silver	10 kg (9,4+0,6)	480 kg

Warning:

- mix until getting a complete mix of the three components;
- do not use to grout porous surfaces such as cotto; previously check the cleanliness of the materials it is applied on;
- completely clean the surfaces of the materials before Fugapox Style 4.0 hardens. After setting it will be extremely difficult;
- working at high temperatures or on surfaces directly exposed to direct sun rays remarkably shortens the workability time of the product;
- bear in mind that temperatures below +12°C can remarkably extend the hardening time and workability can result difficult due to the hardness of the mix;
- wait until final hardening before exposing it to chemical attack;
- do not use Fugapox Style 4.0 for sectioning flexible joints;
- light colours can be sensitive to UVA rays.

Technical and application data

Hazard classification according to the 99/45/EC directive:	comp. A: irritating comp. B: C-corrosive comp. C: none
Specific weight of the body:	1.55 g/cm ³
Open time:	about 45 minutes
Mixing ratio:	comp A: 2.82 comp B: 0.18
Application temperature:	from +5°C to +35°C
Waiting time for joint sealing with standard adhesives:	about 4-7hours(on walls) 1 day (onfloors)
Waiting time for joint sealing with fast adhesives:	about 2 hours (on walls) about 3 hours (onfloors)
Ready for food traffic after:	24 hours
Ready for use:	about 4 days

FINAL PERFORMANCE ACCORDING TO EN 12003

Initial shearing resistance:	24 N/mm ²
Shearing resistance after immersion in water:	23 N/mm ²
Shearing resistance after immersion in water:	24 N/mm ²
Abrasion resistance (EN 12808-2):	145 mm ³
Bending strength (EN 12808-3):	40 N/mm ²
Resistance to compression (according to EN 12808-3):	76 N/mm ²
Shrinkage (EN 12808-4):	0.80 mm/m
Water absorption after 240 minutes (12808-5):	0.05 g
Resistance to acids:	excellent (see table)
Resistance to moisture, solvents, alkali, oils, ageing:	excellent (see table)
Resistance to temperature:	from -20°C to +90°C
Customs item:	32141090

Data survey at +23°C/50% R.H. with out ventilation.
Data highly depend on the installation conditions.



Chemical resistance of ceramic wall tiles grouted with FUGAPOX STYLE 4.0

Group	Name	Concentration	Continuous use at 20° C	Intermittent use 20° C	
Acids	Acetic	2.5 %	(+)	+	
		5 %	(+)	+	
		10 %	-	-	
	Chloridric	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 %	+	+		
Alkali, saturated	Ammonia	25 %	+	+	
	Sodium hydroxide	50 %	+	+	
	Potassium hydroxide	50 %	+	+	
	Sodium hypochlorite				
	Active chlorine	6,5 g/l	(+) +	+	
	Active chlorine	162 g/l	- -	-	
	Sodium hyposulphite		+	+	
	Sodium chloride		+	+	
	Calcium chloride		+	+	
	Iron chloride		+	+	
Saturated solutions	Aluminium sulphite		+	+	
	Sugar		+	+	
	Hydrogen dioxide	1%	+	+	
		10%	+	+	
	Hydrogen dioxide		+	+	
	Gasoline		+	+	
Oils and fuels	Oil		+	+	
	Diesel oil		+	+	
	Olive oil		+	+	
	Ethyl Alcohol		+	+	
	Acetone		-	-	
	Ethylene Glycol		+	+	
	Glycerol		+	+	
	Perchloroethylene		-	-	
Solvents	Trichloroethane		-	-	
	Trichloroethylene		-	-	
	Methylene chloride		-	-	
	Toluol		-	-	
	Benzol		-	-	
	Xylol		-	-	

Key: + Very good resistance / (+) Medium resistance / - Poor resistance