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.

EUROPEAN NORMATIVE R2TE EN 12004 OPERA QUALITY · EN 12004 · WATERPROOF · ANTI-STAIN · ANTI-MOULD · EASY CLEAN TECHNOLOGY · ANTI-ACID · CHEMICAL RESISTANT

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.
• Product for professional use.

Characteristics:

Fugapox Style Industria 4.0 is a highly deformable two-component epoxy adhesive/sealant in class EN 12004 R2TE and EN 13888 in class RG. The formulation of **Fugapox Style Industria 4.0** allows for gluing and grouting, with high mechanical resistance and dimensional stability in the joints. The toughness of the product makes it possible to obtain laying systems that can be considered structurally united, especially required in the industrial field. It also has the ability to distribute important loads and isolate the single tile, absorbing vibrations of various kinds. The high creaminess improves application and cleaning, reducing construction times, with less waste of material.

Application:

mix **Fugapox Style Industria 4.0** component A with component B with a mixer at low speed, to obtain a homogeneous and plastic mixture, paying attention to the application temperatures, +12° C to + 35° C. Apply as an adhesive, with a spatula suitable for the size of the tile and, if required, carry out the double spreading technique EN 11493 point 7.9/7.11. Apply as a sealant with a rubber trowel, filling the joint and removing any excess product. Emulsify with water and felt, cleaning the surface with a suitable sponge (Spugnapox) leaving it free of residues.

Quality and Environmental Standards:

Fugapox Style Industria 4.0 undergoes constant, careful testing at our laboratories, in compliance with the legislation in force UNI EN ISO 9001/2015.

CE

Opera Srl
Via degli Scavi 19/21
47122 Forlì - Italy

17
DOP-IT-01-071
FUGAPOX STYLE INDUSTRIA 4.0
EN 12004:2007+A1.2012
Improved reactive adhesive for laying ceramic tiles indoors and outdoors on walls and floors

Fire reaction	Class E-E-fl.
Adhesion Strength:	
-Adhesion to initial shear	≥2,0 N/mm²
Durability:	
- Shear adhesion after thermal shock	≥2,0 N/mm²
-Shear adhesion after immersion in water	≥2,0 N/mm²
Release of dangerous substances:	Vedi SDS

Characteristics

Excellent creaminess
High chemical and mechanical resistance.
Waterproof
Excellent adhesion on any surface
High cleanability
Excellent durability over time

Application procedure

Notched trowel
Rubber spatula

Color

29 - Silver

30 - Gray Cement

Consumption

3,5 – 5 kg/m²

Storage

Shelf life of 12 months in the original packages at temperatures above +5°C. Do not expose to direct sunlight

Code	Product	Color	Packages	Palette
2514030	Fugapox Style Industria 4.0	Gray Cement	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 obtaining a complete amalgam of the three components;

- do not use to grout porous surfaces such as terracotta and check in advance that the materials on which it is cleaned can be cleaned applied;

- completely clean the surfaces of the materials before Fugapox Style 4.0 harden. At the end of the grip it will be extremely difficult;

- operate at high temperatures or on surfaces exposed to direct sunlight it also significantly shortens the time of workability of the product;

- bear in mind that temperatures below +12°C can considerably lengthen the hardening time and workability can be difficult due to the hardness of the mixture;

- wait for the final hardening before subjecting it to chemical attack;

- do not use Fugapox Style 4.0 for elastic fractionation joints;

- light colors may be sensitive to UVA rays.

Technical and application specifications

Hazard classification as per Directive 99/45/CE:	**comp. A: Xi-irritating** **comp. B: C-corrosive** **comp. C: none**
Pot weight:	**1,55 g/cm³**
Pot life:	**about 45 min**
Mixing ratio:	**comp A: 2,82** **comp B: 0,18**
Application temperature:	**from +5°C to +35°C**
Waiting time for sealing joints with normal adhesives:	**about 4-7 hours (on the wall)** **1 day (floor)**
Waiting time for sealing joints with rapid adhesives:	**about 2 hours (on the wall)** **about 3 hours (on the floor)**
Walk-over time:	**24 hours**
Ready for use:	**about 4 days**

FINAL PERFORMANCE SPECIFICATIONS EN 12003

Initial cutting resistance:	**24 N/mm²**
Cutting resistance after immersion in water:	**23 N/mm²**
Cutting resistance after thermal shock:	**24 N/mm²**
Resistance to abrasion (EN 12808-2):	**145 mm³**
Resistance to flexion (EN 12808-3):	**40 N/mm²**
Resistance to compression (EN 12808-3):	**76 N/mm²**
Retreats (EN 12808-4):	**0,80 mm/m**
Absorption of water after 240 min (12808-5)	**0,05 g**
Acid resistance:	**excellent (see chart)**
Resistance to damp, solvent, oil, alkalis and ageing:	**excellent (see chart)**
Temperature resistance:	**from -20°C to +90°C**
Harmonised curstoms code:	**32141090**

Measurement of data at +23°C / 50% U.R. residual Humidity and no ventilation.
The data may be considerably modified by the conditions of use.

Chemical resistance of ceramic tiling with joints filled using FUGAPOX STYLE 4.0

Group	Name	Conc.	Continuous use at 20° C	Intermittent. use 20° C
Acids	Acetic	2,5 % 5 % 10 %	(+) (+) -	+ + -
	Hydrochloric	37 %	(+)	+
	Chromic	20 %	-	-
	Citric	10 %	-	-
	Formic	2,5 % 10 %	+ -	+ -
	Lactic	2,5 % 5 % 10 %	+ (+) -	+ + (+)
	Nitric	25 % 50 %	(+) -	+ -
	Oleic	-	-	-
	Phosphoric	50 % 75 %	(+) -	+ -
	Sulphuric	1,5 % 50 % 98 %	+ (+) -	+ + -
	Tannic	10 %	(+)	+
	Tartaric	10 %	+	+
	Oxalicv	10 %	+	+
Alkalis, Saturated Solutions	Ammonia	25 %	+	+
	Caustic Soda	50 %	+	+
	Caustic Potash	50 %	+	+
	Ipoclorido Sodio			
	Active Chlorine	6,5 g/l	(+) +	+
	Active Chlorine	162 g/l	- -	-
Saturated Solutions	Sodium hyposulphite		+	+
	Sodium chloride		+	+
	Calcium chloride		+	+
	Iron chloride		+	+
	Aluminium sulphate		+	+
	Sugar		+	+
	Hydrogen peroxide	1% 10%	+ +	+ +
Alkalis, Saturated Solutions	Sodium bisulfite		+	+
	Tannic		+	+
	Tartaric		+	+
	Oxalic		+	+
	Olive oil		+	+
Solvents	Ethanol		+	+
	Acetone		-	-
	Ethylene glycol		+	+
	Glycerin		+	+
	Perchlorethylene		-	-
	Trichlorethane		-	-
	Trichloroethylene		-	-
	Methylene chloride		-	-
	Toluene		-	-
	Benzene		-	-
	Xylene		-	-

Key: + Excellent resistance / (+) Fair resistance / - Poor resistance