PRODUCT SHEET

INDUSTRIA PROEPOXI

Sigillante epossidico bicomponente | Acid - resistant two - part epoxy sealant

Prodotto ad uso professionale | Product for professionals

R2T - RG

DESCRIPTION : **TWO - PART ACID RESISTANT EPOXY MORTAR FOR ADHESION AND GROUTING CERAMIC TILES, LOADED WITH SPECIAL QUARTZ AND PARTICULAR ADDITIVES THAT MAKE IT EASILY APPLICABLE EVEN FOR VERTICAL JOINTS. WASHABLE WITH WATER DURING INSTALLATION**

COMPONENT A : **EPOXY RESIN MIXTURE , ADDITIVES, SILICEUS FILLERS AND PIGMENTS**
COMPONENT B : **ORGANICS CATALIST MIXTURE**

CLASSIFICATION : **EN 12004- EN 13888**

CHARACTERISTICS :
- Excellent adhesion on various types of substrates
- Good chemical and mechanical resistance
- No micro-cracks, because it does not shrink
- Excellent workability
- Excellent punishability
- High hardness
- Low yellowing

FIELDS APPLICATIONS :
- Installation and grouting floor and walls tiles or stone* so for example, glass mosaic, porcelain stoneware, klinker . In environments or surfaces subject to chemical attack or where a leak as non-absorbent as possible is desired, such as wineries, slaughterhouses, dairies, laboratories, kitchen tops, tanneries, industrial kitchens, etc.
- Installation and grouting of floors subject to heavy traffic, industrial warehouses, shopping centres etc..
- Floor and walls swimming pool containing therma water.
- Can be used as an adhesive (Class R2 T according to EN 12004) to glue the above-mentioned coatings on iron and fiberglass after suitable preparation of the support.

** see warnings*

PRE LIMINARY TESTS AND PREPARATION

Check that the adhesive used to fix the tiles has copletely hardened and dried.
The joints must be clean, and free of powder.

MIX PREPARATION :

MIXING RATIO : Part A : 94 parts by weight
Part B : 6 parts by weight

THE TWO COMPONENTS ARE PRE-BATCHED IN THEIR RESPECIVE CONTAINER

To pour completly the component B into the bag of component A ; mixing with elelectric drill equipped with mixing paddle until a uniform, lump -free mix is obtained. Min 3 minuts at 400-600 rpm.
Scrape the sides and the bottom of the container using a steel spatula, to make sur that all the paste is catalyzed. Mixing for 30 sec. Hand mixing is not recommended. The paste is workable for approximately 1 hour, at 23° C.

GROUTING

Introduce the paste into the joints using a special green rubber float . For large surfaces, an electric sigle brush floor maintenance machine equipped with an abrasive resistant rubber scraper can be used. Remove excess product using the rubber float . The products pot life and hardening time is sronglydependent on the ambient temperature. The ideal temperature for application is between +18 et +23°C.
In these condition the product is an easily workable smooth Mortar, with a pot life of about 1 hour.It is ready for foot traffic after 24 hours. At a temperature of +15°C it takes three days before the surface is ready for foot traffic. The floor is ready to use and chemicals resistant after 5 days at a temperature of + 23°C and after 10 days at a temperature of 15°C At temperature between +8+12°C the product is very dense at difficult to apply, the hardening time is also lenghened considerably. Do not add water or solvent to improve workability In hot weather. It is advisable to apply the product to the floor as quickly as possible so as not to shorten further the pot life due to the reaction heat in the contaier.

CLEANING AND FINISHING

The grout work must be cleaned anf finished while the product is still wet and in any case in the shor test possible time. Take care not remove product from the joints or leave stains on tile surface. Cleaning and finishing can be performed either manually or using an electric single - brusch machine equipped with a felt disc.

MANUAL METHOD

First sprinkle clean water over the grouted surface. If necessary perform initial cleaning using a float equipped with a moistened white felt. Make circular movements in both clockwise and anticlockwise directions in order to seal perfectly the sides of the tiles and to remove excess grout the surface on the tiles.
Now perform a second pass with a sweepex sponge in order the obtain a smooth. closed surface and toremove completetly the product from the surface onthe tiles ,without removing it from the joints , as well as to dry off the excess of water. When the felt and sponge are impregnated whit resinand can to longer be used , they must be replaced Stains or residues of transparent product can be removed aftre 24 hours or at any rate after grout hardening (the time of hardening depends gretly on the environment temperature) using the specific Industria ProEpoxy.

METHOD WITH SINGLE-BRUSCH MACHINE

After removing excess grout from the surface , sprinkle plenty of clean water over the grouted surface .
Now commence cleaning using the single brusch machine equipped with a felt disc . Replace the felt disc when it is impregnated with the product . If necessary the cleaner Detepox can be used to remove the residues of epoxy film after 24 hours or at dry rate after grout hardening.

USE AT ADHESIVE

Apply to the substrate using a trowel with suitab le notch size , then position the tiles and press firmly into place.

CONSUMPTION : 1,5-2,0 /KG /MQ SPATULA FROM 4 MM

CAUTIONS

If possible apply the produc tat temeperature between +18°C and + 23°C.
Do not use at low temperature or in environment with higt umidity , in order to avoid the superficial carbonation that may modify the uniformity on the colour.
Remove excess products from the tiles surface rapidly because once hardened i twill to be removed mechanically
Mix the two components correclty
While cleaning change frequently water.

INDUSTRIA PROEPOXI IS SENSITIVE TO UV RAYS.

There may be alterations in the LIGHT colors, yellowing is possible.
Change the fet and the sponge when they impregnated with resin.
Don't walk on the just grouted surface so at no sain the floor with epoxy resin.
Do not cover the grouted surface with length of cloth to avoid the condensation that may cause carbonation
Do not use for grouting Tuscan terracotta oe other materials porous
In case of grouting natural stones it is necessary to execute a preliminary test in order to verify the absorption of resin by stone slabs. If resin is absorbed, dark spots may form on the sides and surface of the slabs and they can't removed . This problem is usual for marble of light colours.
The product must not be used for grouting tanks containing aggressive substance.
Do not mix the product with the water or solvents.

IDENTIFICATION DATA	Component A	Component B
- Apparance	Paste	Liquid
- Colour	Colour table	yellow
- Specific weight	1,55 +/- 0,5	0,9-1
- Dry residue	100%	100%
- Mixing ratio	94 parts by weight	6 parts by weight
- Pot life	*40' to 23°C	-
- Recommended Appl. Temp.	+12°C to + 30°C	-
- Walk on time	24 hours to +23°C	-
- Ready for use	5 days to +23°C	-
- Joints width	1 to 15 mm	-
- Toxicity	Irritating	Irritating
- Conservation	24 months original packing	24 months original packing
- Custom classification	35069190	

**Times change according to the ambient temperature: they are shorter at higher temperatures and longer at lower temperatures*

*** The maximum temperature is intended as an occasional and non-continuous service*

PERFORMANCE:	APPLICATION DATA	REQUIREMENT	RULE
CLASS.RG NORMA EN 13888			
- Abrasion resistence	: <250mm^3	<250mm^3	EN 12808-2
- Flexural strength after dry storage	: > 30 N/mm^2	> 30 N/mm^2	EN 12808-3
- Compressive strength after dry	: > 45 N/mm^2	> 45 N/mm^2	EN 12808-3
- Shrinkage	:< 1,5 mm/m	<1,5 mm/m	EN 12808-4
- Water absorption after 240 min	: <0,1g	<0,1g	EN 12808-5
CLASS. R2T NORMA EN 12004			
- Initial shear adhesion strength	: 5,6N/mm^2	>2 N/mm^2	EN 12003-7.3
- Initial shear adhesion strength after water immersion	: 7,4N/mm^2	>2 N/mm^2	EN 12003-7.4
- Initial shear adhesion after thermal shock	: 2,5N/mm^2	>2 N/mm^2	EN 12003-7.5
- Open time	: 30 min	>20 min	EN 1346
- Sliding	: <0,2mm	<0,5mm	EN 1308

PACKAGING :

- Kg. 10 Net weight
- Kg. 5
- Kg 3
- Kg 2,5

MIX RATIO :

Part A = 9,4 parts by weight	Part B = 0,6 parts by weight
Part A = 4,7 parts by weight	Part B = 0,3 parts by weight
Part A = 2,82 parts by weight	Part B = 0,180 parts by weight
Part A = 2,35 parts by weight	Part B = 0,15 parts by weight

The two components are pre-batched in their respective container

EXAMPLE :

Tipe of tiles	Format mm.	Thickness mm.	Joint mm.	Consumption kg/mq
Porcelain stoneware	7,5 x 15	6	3	0,7
Porcelain stoneware	10 x 10	6	3	0,6
Porcelain stoneware	10 x 20	10	6	1,7

CHEMICAL RESISTANCE TABLE

INDUSTRIAL FLOOR

GROUP	NAME	CONC.	SERVICE CONTINU. 20° C	SERVICE INTERMITT. 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%	(+)	+
	OXALIC	10%	+	+
ALKALIS and SOLUTIONS SATURATED	AMMONIA	25%	+	+
	SODIUM HYDROXIDE	50%	+	+
	HYDROXYDE DE POTASSIUM	50%	-	(+)
	HYPOCHLORITE DE SODIUM CL. ACTIF CL. ACTIF	 6,5 g/l 162 g/l	 (+) -	 + -

LEGEND: + = EXCELLENT RESIST. (+) = DISCREET RESIST. - = POOR RESIST.

GROUP	NAME	CONC.	SERVICE CONTINU. 20° C	SERVICE INTERMITT. 20° C
SATURATED SOLUTIONS	IPOSULPHITE SODIUM		+	+
	SODIUM CHLORIDE		+	+
	CALCIUM CHLORIDE		+	+
	IRON CHLORIDE		+	+
	SULPHATE ALLUMINIUM		+	+
	SUGAR		+	+
	HYDROGEN PEROXIDE	1% 10%	(+) (+)	+ +
	SODIUM DISOLPHITE		(+)	+
OILS and FUELS	ESSENCE		+	+
	PETROL		+	+
	GAS OIL		+	+
	OLIVE OIL		+	+
SOLVENTS	ETHYL ALCOOL		-	(+)
	ACETONE		-	-
	ETHYL GLYCOL		+	+
	GLYCERINE		+	+
	PERCHLORETHYLENE		-	-
	TRICHLOROETHANE		-	-
	TRICHLOROETHYLENE		-	-
	METHYLENE CHLORIDE		-	-
	TOLUENE		-	-
	BENZENE		-	-
	XYLENE		-	-

LEGEND: + = EXCELLENT RESIST. (+) = DISCREET RESIST. - = POOR RESIST.

Safety Instructions Reg.1907/2006/EC (REACH) ,Article 31

Component A :

Components dangerous for labelling

- Product of reaction Bisphenol A – epichlorohydrin epoxy resins molecular weight < 700
- Product of reaction Bisphenol F - epichlorohydrin epoxy resins molecular weight < 700
- C12- C14 mono glycidil ether

Content epoxy resin.

Component B :

Components dangerous for labelling

- fatty acid C18 – unsat,dimers, polymer with tall-oilfatty acid and triethylenetetramine
- Triethylene tetramine propoxilated

N.B. Although the information provided on this technical sheet is accurate to the best of our knowledge and experience . It is inteded purely as guideline .The user must carry out preliminary pratical tests for each specific job and solely responsible for the final result.

PERFORMANCE:	APPLICATION DATA	REQUIREMENT	RULE
CLASS.RG NORMA EN 13888			
- Abrasion resistence	: <250mm^3	<250mm^3	EN 12808-2
- Flexural strength after dry storage	: > 30 N/mm^2	> 30 N/mm^2	EN 12808-3
- Compressive strength after dry	: > 45 N/mm^2	> 45 N/mm^2	EN 12808-3
- Shrinkage	:< 1,5 mm/m	<1,5 mm/m	EN 12808-4
- Water absorption after 240 min	: <0,1g	<0,1g	EN 12808-5
CLASS. R2T NORMA EN 12004			
- Initial shear adhesion strength	: 5,6N/mm^2	>2 N/mm^2	EN 12003-7.3
- Initial shear adhesion strength after water immersion	: 7,4N/mm^2	>2 N/mm^2	EN 12003-7.4
- Initial shear adhesion after thermal shock	: 2,5N/mm^2	>2 N/mm^2	EN 12003-7.5
- Open time	: 30 min	>20 min	EN 1346
- Sliding	: <0,2mm	<0,5mm	EN 1308

PACKAGING :

- Kg. 10 Net weight
- Kg. 5
- Kg 3
- Kg 2,5

MIX RATIO :

Part A = 9,4 parts by weight	Part B = 0,6 parts by weight
Part A = 4,7 parts by weight	Part B = 0,3 parts by weight
Part A = 2,82 parts by weight	Part B = 0,180 parts by weight
Part A = 2,35 parts by weight	Part B = 0,15 parts by weight

The two components are pre-batched in their respective container

EXAMPLE :

Tipe of tiles	Format mm.	Thickness mm.	Joint mm.	Consumption kg/mq
Porcelain stoneware	7,5 x 15	6	3	0,7
Porcelain stoneware	10 x 10	6	3	0,6
Porcelain stoneware	10 x 20	10	6	1,7