

# VitrA Fix EPOXY ULTRA



Epoxy resin based, high performance, chemical resistant, solvent free, 2 component adhesive and joint filler

## DESCRIPTION

Two-component, solvent-free epoxy resin based, acid, alkali and chemical resistant, water impermeable, hygienic joint filling material suitable for ceramic tile surfaces. Can be used in 2-10 mm joint widths of all kinds of floor covering materials. Hygienic, dirt repellent and easy to clean with cold water. It has hardening feature without cracking.

## AREAS OF USE

- In industrial facilities such as food production, hospitals, laboratories, auto service etc. where high chemical and mechanical resistance is required.
- Commercial kitchens, restaurants, cafes, etc. where hygiene is required.
- Suitable for use in waste water treatment plants and thermal pools.
- Acid resistant porcelain tiles, granite ceramics, cotto, marble etc. in 2-10 mm joint filling applications of coating materials.

## FEATURES

Material structure :	: Epoxy resin based putty
- Component (A)	: Hardening paste
- Component (B)	: Component (A) + Component (B)
Type	: Grey / white / beige / anthracite
Color	
Density	: $1.70 \pm 0.1 \text{ gr/cm}^3$ (A+B mixture)

## TECHNICAL PERFORMANCE\*

Water absorption (after 240 minutes)	: $\leq 0.1 \text{ g}$
Moisture resistance	: excellent
Temperature resistance	: $-20 \text{ }^{\circ}\text{C} - +80 \text{ }^{\circ}\text{C}$
Bending strength	: $\geq 30 \text{ MPa (N/mm}^2\text{)}$
Compression strength	: $\geq 45 \text{ MPa (N/mm}^2\text{)}$
Abrasion resistance	: $\leq 250 \text{ mm}^3$
Shrinkage value	: $\leq 1.5 \text{ mm/m}$

\*These values are obtained as a result of laboratory tests and are the performance values of the finished applications after 28 days. Values may vary due to differences in the construction site environment.

## REFERENCE STANDARD

- TS EN 13888 / RG class.
- G
- Bayindir pos. No: 10.300.2233

## CONSUMPTION

Approximate consumption ( $\text{kg/m}^2$ ) may vary depending on the application surface, tile size and comb size used.

		Der Genişliğine Göre Yaklaşık Tüketim ( $\text{gr/m}^2$ )		
Karo Ebatları (cm)	Karo Kalınlığı (mm)	2 mm	3 mm	5 mm
10X10	6	450	675	1125
20X20	8	300	450	750
30X30	8	200	300	500
30X60	8	150	225	375
45X45	8	135	200	335
60X60	9	115	170	280
60X120	9	85	130	210

\*Sample consumption.

- Can also be used as an adhesive on horizontal surfaces
- High mechanical and chemical resistance
- High resistance to external weather conditions and thermal shocks
- Resistant to bacteria, mold growth and contamination
- Water-based, environmentally friendly formula



## PACKAGING

5 kg plastic bucket (3,75 kg component A + 1,25 kg component B)  
(75 pieces / 375kg per pallet)

## STORAGE AND SHELF LIFE

- For storage, maximum 4 plastic buckets should be placed on top of each other.
- Product storage conditions must be complied with and products must not be stored in damp and waterlogged warehouses.
- Shelf life is 1 year provided that the packages are kept in closed and moisture-free environments. Production date and charge number are indicated on the packaging.
- Packages should be tightly closed when not in use.
- Storage below  $12 \text{ }^{\circ}\text{C}$  is not recommended as crystallization may occur in the product stored at low temperatures. Crystallization formation may make the application of the product difficult. For this reason, products stored below  $+12 \text{ }^{\circ}\text{C}$  should be kept at  $+23 \text{ }^{\circ}\text{C}$  room temperature for 1-2 days before application.

## APPLICATION FEATURES

Mixture use time (Pot life)	: 50 minutes at $+20 \text{ }^{\circ}\text{C}$ , 40 minutes at $+30 \text{ }^{\circ}\text{C}$ ,
Application temperature	: $+12 \text{ }^{\circ}\text{C} - +30 \text{ }^{\circ}\text{C}$
Recommended joint width	: 2-10 mm
Time to use	: 24 hours
Waiting time for chemical resistance	: 7-8 days

## SURFACE PREPARATION

- Joint gaps must be cleaned of adhesion inhibiting residues and must be completely empty and smooth.
- Joint filler should not be applied before the recommended waiting period after adhesive application is completed.
- It should be ensured that the application surface humidity is maximum 5%.

## APPLICATION

- Component A and Component B should be mixed in the same bucket for a minimum of 3 minutes until the mixture is homogeneous and free of lumps.
- No additives other than the components should be added to the mixture and the ratio of Component A and Component B should not be changed.
- The mixture should have a consistency that will not flow when taken on the trowel.
- The prepared joint filling material should be filled into the joint gaps with a rubber spatula or steel trowel. During the application, the mortar should not spread on the tile surface like cement based joint fillers and should not overflow out of the joint gaps as much as possible (product consumption can be reduced and final cleaning is easier). Remove excess joint filling material from the surface.
- The time to clean the joint filler material from the surface is the moment when the surface of the joint filler material starts to become dull. This time may vary depending on the ambient conditions, normally 40 minutes at an ambient temperature of  $+20 \text{ }^{\circ}\text{C}$ , whereas it may shorten in a hot environment and prolong at low temperatures. To find the appropriate time, touch the joint material residue on the tile with your finger, if the joint material is slightly smeared on the finger, the material has dried sufficiently for cleaning.
- Clean water should be used for cleaning.
- It is recommended to use special cleaning pads for epoxy applications for cleaning. In the first stage, rough cleaning is done with a thick filled pad. The application should be done with circular movements to prevent the joint filling material from separating from the surface or deforming.
- In the second stage, fine cleaning is performed with a thin-filled pad. The application is done as in the first stage.
- In the final cleaning stage, the residues on the surface are removed with diagonal (45 degree angle) movements using a sponge with cold water. Clean water should be used to moisten the sponge, while cleaning water for the soiled sponge should be kept separate. If the surface feels sticky to the touch, the final cleaning step should be repeated with a damp sponge.

## PRECAUTIONS

- Water or any additive other than the components should never be added to the mixture and the mixing ratio of components A and B should not be changed.
- After mixing the A and B components, the product can be divided into 2-3 parts and applied separately to prevent rapid freezing of the mortar.
- In pool and industrial floor applications, a minimum of 7 days should be waited for the joint material to gain sufficient strength.
- The usability time of VitrA Fix EPOXY ULTRA may vary under unfavorable ambient conditions, but this time can be reduced to 10-15 minutes under higher temperature ambient conditions. For this reason, a wetness test should be performed by touching the joint surface with a finger in case of premature hardening. When the mortar does not get on the fingers, the cleaning stage should be started.
- In applications to be made in large areas, necessary expansion joints should be left considering the thermal stress and mechanical loads that may occur on the floors, and suitable expansion profiles or mastics (PU, MS Polymer, silicone etc. based) should be used for these joints.
- The joint treated surfaces should be protected from direct sunlight, frost and rain for at least 24 hours.
- Depending on weather conditions and sunlight (UV), discoloration and yellowing of the hardened joint sealant material may occur. This is a natural behavior of epoxy resin based products, there is no loss of performance in the product.
- In case of prolonged exposure to some substances with chemical effects (e.g. continuous contact with high concentration acids), discolouration may occur.
- Application between joints of porous materials such as terracotta etc. is not recommended without taking precautions against staining.
- In industrial floor applications, the acid or alkali balance in the environment must be strictly controlled. The effect of chemical products in the environment on the epoxy joint filling material should be checked from the Chemical Resistance Table.

## SAFETY INSTRUCTIONS

- VitrA Fix EPOXY ULTRA contains epoxy resin and amine hardener.
- Avoid contact with skin and eyes. Contact areas should be washed with plenty of water.
- It is recommended to use rubber gloves and protective goggles during product application.
- The product should not be inhaled directly. Depending on the ambient temperature, the product vapor that enters the air by evaporation should never be inhaled. A mask should be used when necessary. The environment must be ventilated during application.
- For more detailed information, please read the Material Safety Data Sheet (MSDS).

**Note:** Technical values and application instructions are the results of our experience and tests carried out in accordance with international standards, valid at ambient conditions of  $23 \text{ }^{\circ}\text{C}$  and 50% relative humidity.