



MAXEPOX[®] BOND

TWO-COMPONENT EPOXY BONDING AGENT



DESCRIPTION

MAXEPOX[®] BOND is a two-component and 100% solids –solvent free- epoxy-based bonding agent, which has been specially designed for the bonding of construction materials.

APPLICATION FIELDS

- Bonding of fresh concrete to roughened fully cured concrete.
- Bonding concrete to all type of construction materials such as stone, marble, wood, glass, etc.

ADVANTAGES

- Exceptional adhesion.
- Excellent mechanical properties.
- Very good resistance to chemical agents and ageing.
- Solvent-free and easy to apply.

APPLICATION INSTRUCTIONS

Surface preparation

Surface to be bonded must be structurally sound and clean, free of dust, coatings, efflorescences, oil, grease, gypsum, or any foreign material that could affect to adhesion. Substrate should be provided with a slight roughness and must be dry.

Additional information concerning to the surface preparation and application procedure can be found on our technical note *Recommendations for the use of epoxy-based bonding agents*.

Mixing

MAXEPOX[®] BOND is supplied as a pre-weighed two-component set. The hardener, component B, is poured into the main component A. To ensure the proper reaction between both components, make sure that all of component B is added. Mix mechanically using a slow speed drill (up to 300 rpm) until achieving a homogeneous product in colour and appearance. Small quantities of product can also be mixed by hand. Do not mix for prolonged period nor use high-speed mixer, which may heat the mixture or introduce air bubbles. Check the technical data table for the pot-life or time it takes the product to harden inside the container. The pot-life for a 5 kg set at 20°C is 75 minutes, increasing with lower temperatures or small quantities of mixture and reducing with higher temperatures.

Application

Apply **MAXEPOX[®] BOND** in a thin layer on the surface to be bonded, using a short haired brush, short pile roller, spatula, etc. Apply a uniform and homogenous

layer with consumption from about 0,3 to 1,0 kg/m², depending on the substrate conditions.

New concrete or construction material must be placed while **MAXEPOX[®] BOND** is still tacky in the open time interval. If bonding agent dries before next application, apply it again. Consult the technical data table; open time at 20°C is 2 hours, increasing with lower temperatures and reducing with higher temperatures.

Application conditions

Minimum substrate temperature is 5°C and the relative humidity for the air is less than 80 %. Surface and air temperature must be at least 3°C higher than dew point during the application and curing process. For low temperatures and/or high humidity levels, use dry and hot air, i.e., air from an electric powered air blower system, in order to get a suitable application condition.

If the concrete contains humidity, it is not sufficient to dry the surface with hot air, as the humidity within the concrete will quickly rise to the surface. In this case use **MAXEPOX[®] BOND -W** (Technical Bulletin No.: 75).

Curing

Do not apply with temperature below 5°C or if it is expected to drop below 5°C within 24 hours. Allow a curing time of 4 days at 20°C and 50% R.H. for total curing and before putting into service. Applications carried out at lower temperatures, with high humidity or with poor ventilation require longer drying and curing times.

Cleaning

Tools and equipment can be cleaned with **MAXEPOX[®] SOLVENT** immediately after use. Once the product hardens, it can only be removed by mechanical methods. Do not use any solvent at all for personal cleaning.

CONSUMPTION

The estimated consumption for **MAXEPOX[®] BOND** varies from 0,3 kg/m² to 1,0 kg/m². These figures may vary depending on the roughness, surface conditions and the application method. A preliminary test on-site will determine the coverage exactly.

IMPORTANT INDICATIONS

- Surface moisture content must not exceed 4%.
- Allow new concrete and mortar to cure 28 days before applying **MAXEPOX[®] BOND**.
- Apply the element to fix while **MAXEPOX[®] BOND** is still tacky. Do not allow the bonding agent to dry.
- Do not add water, solvents, aggregates, admixtures, or any other compounds to **MAXEPOX[®] BOND**.

- Avoid condensation, damp, or water contact for at least 24 hours after application.
- For further information and other uses not specified in this Technical Bulletin consult our Technical Department.

PACKAGING

MAXEPOX® BOND is supplied in two-component pre-weighed sets of 2, 5 and 10 kg.

STORAGE

Twelve months in its original unopened containers in a dry and covered place, with temperatures between 5°C and 30°C. Protect against direct sunlight and frost.

Temperatures below 5°C lead the crystallization of the product. Should this happen, it must be heated slowly while is regularly stirred until achieving its homogeneous and original lump-free conditions.

SAFETY AND HEALTH

When mixing and applying **MAXEPOX® BOND**, do not work without the protection of rubber gloves and safety goggles. Do not inhale vapours from heating and combustions process. In case of eye contact, rinse immediately with clean water without rubbing and seek medical assistance. In case of skin contact, wash with abundant water and soap. If ingested, seek immediate medical assistance. Do not induce vomiting. Observe the usual precautions necessary for the use and applications of this type of product.

For further information, Safety Data Sheet for **MAXEPOX® BOND** is available by request.

Disposal of the product and its empty packaging must be made by the final user and according to official regulations.

TECHNICAL DATA

Characteristics of the product	
<i>CE Marking, EN 1504-4 Description:</i> Two-component, epoxy based bonding agent.	
<i>Principles/Methods.</i> Structural strengthening by plate bonding (Principle 4-SS/4.3), Structural strengthening by adding mortar or concrete (Principle 4-SS/4.4),	
<i>CE Marking, EN 1504-7</i>	
<i>Description.</i> Two-component, epoxy based bonding agent.	
<i>Principles/Methods.</i> Control of anodic areas by painting reinforcement with coatings containing active pigments (Principle 11-CA/11.1), Control of anodic areas by painting reinforcement with barrier coatings (Principle 11-CA/11.2)	
Solid content (% , by weight)	100
A:B mixing ratio (by weigh)	2:1
Conditions for application and curing	
Temperature for application and curing, (°C)	>5
Pot life at 10°C / 20°C / 30°C (5 kg), (min)	150 / 75 / 20
Open time at 10°C / 20°C / 30°C (h)	4 / 2 / 0,75
Time for total curing at 10°C / 20°C / 30°C, (d)	5 / 4 / 3
Characteristics for cured product	
Compressive strength at 24 h & at 20°C, (MPa)	80
Flexural strength at 24 h & 20°C, (MPa)	20
Modulus of elasticity at 24 h & 20°C, (MPa)	17.000
Consumption	
Consumption* per coat, (kg/m ²)	0,3-1,0

(*)These figures may vary depending on the roughness and the surface conditions. A preliminary test on-site will determine the coverage exactly.

GUARANTEE

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