

DESCRIPTION

EPOPRIMER BV is a 2-component, water based epoxy resin. Components, once mixed, are totally compatible with moist supports, and the resulting polymerized product is a crystalline material with high adhesion and tensile strength. It effectively blocks residual moisture flow and prevent blistering of the polyurethane coating applied on top.

This primer of epoxy nature with vapour barrier, is specially indicated for the subsequent projection of our polyurea and polyurethane based waterproofing systems, such as:

- Roof and wall refurbishments.
- Waterproofing treatment of tanks and other water management facilities.
- Floorings in moisture-affected environments.

Moist surfaces are troublesome when treated with any synthetic resin, both because of immediate adhesion difficulties and problems arising afterwards, due to the upward water pressure.

In many cases, material and time constraints force applicators to work on less-than-optimal support conditions, and a moisture-adressed product is needed in order to:

- Minimize adhesion failures.
- Avoid blistering due to the water pressure from below (support saturation).
- Avoid air bubbles, due to the water vapour pressure which cannot be released (mostly encountered in elastic membrane treatments).
- Incompatibility of the support with one-component, moisture-cured polyurethane resins.

PACKAGING

Combined containers of 5 kg y 18 kg:

- Component A: 1,4 kg / 5,2 kg
- Component B: 3,6 kg / 12,8 kg

SUPPORT REQUIREMENTS

In order to achieve good penetration and bonding, support must be:

1. Flat and levelled (Product is self-levelling).
2. Compact and cohesive (pull off test must show a minimum resistance of 1,4 N/mm²).
3. Even and regular Surface.
4. Free from cracks and fissures. If any, they must be previously repaired.
5. Clean and dry, free of dust, loose particles, oils, organic residues or laitance.

INFORMATION ON THE PRODUCT BEFORE APPLICATION				
Chemical description	COMPONENT A Epoxy Resin		COMPONENT B Aqueous polyamine solution	
Physical state	Liquid		Liquid	
Non volatile content (%)	Aprox 100 %		31 %	
Flash point	>100 °C		>100 °C	
Color	Colorless		Slightly yellow	
Density	1,14 g/cm ³		1,05 g/cm ³	
Viscosidad (Brookfield)	Temperature (°C)	Viscosity (mPa.s)	Temp (°C)	Viscosity (mPa.s)
	35	70	35	170
	25	150	25	280
	15	300	15	500
	5	500	5	1800
VOC (g/l i %)	0		2 g/l 0,2%	
Mixing ratio	A=100 B=244 by weight A=100 B=266 by volume			
Mixture properties	Density 1,07 g/cm ³ at 23°C Viscosity 1300 mPa.s at 23 °C Solids: 51%			
Pot life	Temperature (°C)		Pot life (100g/min)	
	10		90	
	25		45	
	35		30	
Almacenamiento y caducidad	Keep between 10 °C and 30 °C. Frost-sensitive. Component A may crystallize if stored for protracted periods under certain conditions. If this occurs, it can be restored to its original condition by heating it to 70 - 80 °C and stirring it thoroughly. Use before 12 months after manufacturing date.			

INFORMATION ON THE FINAL PRODUCT		
Final state	Solid, hard membrane	
Color	Light yellow	
Hardness (Shore)	64 D	
Solid membrane density	1,3 g/cm ³	
Mechanical properties	Maximum elongation: 3,2% Tensile strength: 39 MPa (EN-ISO 527-3)	
Tear resistance	7,2 N/mm	
Gloss	14%	
Adherence strength	Surface	Adherence (MPa)
	Concrete	
UV Resistance	This product shows a slight decoloration after UV exposure, without any loss of mechanical properties.	
Usage temperature	Stable up to 80 °C	

RECOMMENDED ENVIRONMENTAL CONDITIONS

Support temperature should be between 15 °C and 40 °C. At higher temperatures, specific precautionary measures must be taken. Please follow manufacturer advice. Application under low temperature and high humidity conditions is not recommended.

SUPPORT PREPARATION

Concrete surfaces must be previously prepared by sandblasting or any other suitable means. Remove all dust and loose material before priming.

MIXING

Stir and homogenize thoroughly component A and B using a low-speed stirrer. The mixture turns to a whitish, milky dispersion. After application, the milky layer should turn to a colorless film in a one to two hour period, depending on temperature, humidity and thickness.

APPLICATION

Apply 200 to 500 g/m², by brush or roller. Higher quantities may lead to white/translucent areas and poor appearance.

On very absorbent substrates, dilution is allowed. Use 10 to 20% water. On hot surfaces (e.g. recently exposed to sun), moist the surface before starting application.

Application in excess can lead to resin retraction upon water evaporation. Do not exceed the recommended application quantities. If some white spots appear after curing, they must be removed before application of following coats.

CURING TIME

Data for a 500 g/m² application. High temperature and low humidity favors the drying process. High humidity conditions make the initial milky film to remain white and sticky.

Conditions	Dry to touch (hours)
25 °C, 5%	6
25 °C, 90%	10 (milky)
35 °C, 20%	2
6 °C, 50%	>100
-15 °C	> 100 (always milky)

TOOL CLEANING

Component A can be cleaned using epoxy solvent. Component B and the unreacted AB mixture can be cleaned with water.

SAFETY

Epoxy components are potentially sensitizing. Always follow instruction provided in the Material Safety Data Sheet. As a general rule, suitable skin and eye protection must be worn. This product is intended to be used only for the uses and in the way here described. This product is to be used only by industrial or professional users. It is not suitable for DIY-type uses.

ENVIRONMENTAL PRECAUTIONS

Empty containers must be handled with the same precautions as if they were full. Treat empty containers as hazardous waste, and transfer them to an authorized waste manager. If the containers still have some material left, do not mix with other product before considering the risk of potential dangerous reactions. Never mix in volumes larger than 5 liters in order to prevent a dangerous heat evolution.

IMPORTANT INFORMATION AND SAFETY PRECAUTIONS

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