

EP Aquaprimer

WATER-BASED EPOXY RESIN FOR PRIMING

DESCRIPTION and APPLICATIONS

Epoxy, 2-component, water based resin for concrete surface priming. EP Aquaprimer is a suitable solution for applications waterproofing liquid polyurethane membranes when moisture content in the support exceeds 4%.

EP Aquaprimer is an easily applied primer which can be used in moderately moist surfaces or showing slight residual moisture.

Waterproof but water permeable. This helps to prevent water condensation and blistering. Specifically designed for use with water-based combinations.

Technical data

PRODUCT INFORMATION BEFORE APPLICATION

	Component A	Component B																				
Chemical description	Water-based polyamine hardener.	Modified epoxy resin																				
Physical state	Liquid	Liquid																				
Packaging	Plastic container 12 kg 6 kg	Metal container 4 kg 2 kg																				
Non-volatile content (%)	26%	100%																				
Flash Point	>120°C	>120°C																				
Colour	Light yellow	Light yellow																				
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VOC Content 7g/L, 0,7% 7 g/L, 0.7%

Mixing ratio A/B A=100, B=33 by weight
A=100, B=30 by volume

Mixture properties Density :1,02 g/cm³ at 20°C
Viscosity: 4700 mPa.s at 20°C
Colour: milky white

Pot life
Approximate

<i>Temperature (°C)</i>	<i>Pot life (100 g, minutes)</i>
5	120
20	90
35	60

Storage Keep at temperatures between 10° and 30°C. Frost-sensitive product. It is recommended to store this product indoor and away from moisture.

Use before 12 months after manufacturing date.

FINAL PRODUCT PROPERTIES

Final state Solid membrane

Colour Colourless to slightly yellow

Hardness 66D
Shore (ISO 868)

Mechanical properties Maximum elongation: 4%
Tensile strength: 27 MPa

Solid density 1,2 g/cm³

UV resistance This product can change colour slightly under sunlight, with no impairment of its mechanical properties.

Chemical resistance Permanent contact (3 days, 80°C, the lower weight gain, the better)

<i>Chemical</i>	<i>% weight gain</i>
Water	5
Methoxypropyl acetate	40
Isopropyl alcohol	15
Xylene	25
Diesel	5
Bleach	10
Acetic Acid (10%)	40

Surface contact (24 h, room temperature, 5=ok, 0=not recommended)



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Chemical	Result
Water	5
Engine oil	5
Vinegar	5
Hydrogen peroxide	1
Sulphuric acid (10%)	2
Sulphuric acid (30%)	1
Isopropyl alcohol	3
Xylene	2
Diesel	5
Ammonia (3%)	4
Methoxypropyl acetate	0
Acetic acid (10%)	0
Bleach	2
Sodium hydroxide (40 g/L)	4
Skydrol	5

Adhesion strength

Surface	Adhesion (MPa)
Concrete	>50

Use temperature

Stable up to 80°C

APPLICATION GUIDELINES

Recommended combinations

Priming with EP Aquaprimer at 150 g/m² minimum. On very absorbent surfaces a second coat of EP Aquaprimer may be necessary for a proper sealing.

Support requirements

In order to achieve a 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.

Environmental conditions

Application must be done at support temperatures 3°C above dew point. Air temperature must be above 5°C and relative humidity below 80%. Application temperature must be less than 40°C. Optimal temperature range is 10°C- 30°C. These temperatures must be constant throughout drying process. Application should be done with plenty of air/ventilation.

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 homogenise thoroughly component A and B using a low-speed stirrer. The mixture turns to a homogenous milky solution. Water (up to 10%) may be added if deemed necessary for ease of application. Do not mix more material than the amount usable within the pot life window.



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Application/recommended amounts Apply by brush, roller or airless spraying equipment from 150 g/m2.

Curing time 250 microns application
Approximate values

<i>Conditions</i>	<i>Dry to touch (h)</i>
35°C, 25%rh	4
35°C, 60% rh	5
20°C, 10% rh	24
20°C, 40%rh	24
20°C, 90%rh	24 (whitish)
3°C, 60% rh	>30 (whitish)

Reapplication A second application may be done when the first one is dry to touch, and always within the first 24 hours.

Tool cleaning Cleaning of tools contaminated with both components can be done with water, before hardening.

Safety Epoxy components of component B are potentially sensitizing. Component A is corrosive. 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 litres in order to prevent a dangerous heat evolution

Other information The information contained in this Technical Data Sheet, as well as our advice, both written as oral or provided through testing, are based on our experience, and they do not constitute any product guarantee for the installer, who must consider them as simple information.
We recommend to study deeply all information provided before proceeding to the use or application of any of our products, and strongly advise to conduct tests "on-site" in order to determine their convenience for a specific project.
Our recommendations do not exempt of the obligation of installers to deeply study the right application method for these systems before use, as well as to conduct as many preliminary tests as possible should any doubt arise. The application, use and processing of our products are beyond our control, and therefore under the exclusive responsibility of the installer. In consequence, the installer will be the only responsible of any damage derived from the partial or total in-observation of our indications, and in general, of the inappropriate use or application of these materials.
This Data Sheet supersedes all previous versions.

Krypton Chemical SL

c. Martí i Franquès, 12
Pol. Ind. les Tàpies
43890-l'Hospitalet de l'Infant- Spain
Tel: +34 902 908 062
Fax: +34 977 823 977
rayston@kryptonchemical.com
www.raystonpu.com



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