



## EPOXY WATER BASED PRIMER

### DESCRIPTION

Wet surfaces pose a serious problem for any treatment with resins, both due to the difficulty in obtaining an optimal anchorage and the subsequent problems that this humidity poses over time.

In many cases, the working conditions and the speed with which it is necessary to act make it impossible for the supports to be in the correct conditions, being essential to apply some type of product that minimizes the problems caused by humidity, such as:

- Lack of adherence (due to saturation of the support).
- Appearance of air bubbles ("bubbles"), due to the pressure exerted by water vapor, and its difficulty in coming to the surface (especially in the case of treatments with elastic products).
- Total incompatibility with single-component polyurethane resins (which react with humidity in the air).

Rayston Epoxy H LV is therefore the appropriate solution to apply waterproofing or paving polyurethanes on substrates with humidity levels of more than 4%.

This product, however, is not suitable when it comes to humidity due to groundwater or capillarity, with a pressure greater than 1.5 N / mm.

It is a 2-component water-based resin that, once mixed, is fully cotible with wet or wet substrates, and which, after its polymerization, forms a crystalline product of great hardness and adherence, which acts as a barrier against residual humidity, and prevents the formation of bubbles on the surface.

### APPLICATION

This product is very useful in all kinds of waterproofing works, involving the use of polyurethanes, such as:

- Rehabilitations of terraces, roofs, etc.
- Waterproofing treatments and rehabilitations in tanks, tanks, reservoirs and other water storage and channeling systems.
- Flooring in premises exposed to moisture continuously.

### TECHNICAL DATA

#### PRODUCT INFORMATION BEFORE APPLICATION

	Component A	Component B										
<b>Chemical identity</b>	Epoxy resin	Aqueous polyamine solution										
<b>Physical state</b>	Liquid	Liquid										
<b>Presentation</b>	Metal container	Plastic container										
	4.6 kg	13.4 kg										
	1.3 kg	3.7 kg										
<b>Solid content</b>	approx 100	approx 28										
<b>Flashpoint</b>	> 100°C	> 100°C										
<b>Colour</b>	Colorless	Yellow										
<b>Density (25°C)</b>	1.14 g / cm <sup>3</sup>	1.02 g / cm <sup>3</sup>										
<b>Viscosity</b>	<table border="1"> <thead> <tr> <th>Temperature (°C)</th> <th>Temperature (°C)</th> </tr> </thead> <tbody> <tr> <td>35</td> <td>70</td> </tr> <tr> <td>25</td> <td>150</td> </tr> <tr> <td>15</td> <td>300</td> </tr> <tr> <td>5</td> <td>500</td> </tr> </tbody> </table>		Temperature (°C)	Temperature (°C)	35	70	25	150	15	300	5	500
Temperature (°C)	Temperature (°C)											
35	70											
25	150											
15	300											
5	500											
Brookfield Approximate Values	Viscosity (mPa.s)	Viscosity (mPa.s)										
	35	70										
	25	150										
	15	300										
	5	500										
	5	1800										
<b>VOC (g / L i%)</b>	0	2g / L 0.2%										
VOC category according to directive												
<b>Mixing ratio</b>	A = 100, B = 291 by weight											
<b>Mix characteristics</b>	Density 1.05 g / cm <sup>3</sup> at 23°C Viscosity 1050 mPa.s at 23°C Solids: 40%											
<b>Colour</b>	Milky white											

**Storage and** Store between 10° and 30°C. Under certain storage conditions, component A can crystallize. If this

**expiration** occurs, it can be reverted to the original state by heating to 70-80°C and completely homogenizing.

Expiration: 12 months from manufacture

#### FINAL PRODUCT INFORMATION

<b>Final state</b>	Solid membrane
<b>Colour</b>	Light yellow
<b>Hardness (Shore) (ISO 868)</b>	64D
<b>Density of the solid</b>	1.3 g / cm <sup>3</sup>
<b>Mechanical properties</b>	Maximum elongation: 3.2% Maximum traction: 39 MPa (EN-ISO 527-3)
<b>UV resistance</b>	The product undergoes very slight color change with sun exposure, without loss of mechanical properties.
<b>Brightness (60°C)</b>	14%
<b>Tear resistance</b>	7.2 N / mm
<b>Use temperature</b>	Stable up to 80°C

### CHEMICAL RESISTANCE

Continuous contact (3 days, 80°C)

Substance	% weight gain
Water	5
Methoxypropylacetate	25
Isopropyl alcohol	fifteen
Skydrol	0
Xylene	10
Ammonia (3%)	10
Acetone	35
Gasoil	5
Peroxide	10
Sodium hydroxide (40 g / L)	10
Bleach	5
Sulfuric acid (10%)	30
Sulfuric acid (30%)	30
Sulfuric acid (50%)	30
Acetic acid (10%)	fifteen

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

Substance	Outcome
Water	5
Vinegar	5
Ethanol	5
Motor oil	5
Peroxide	5
Sulfuric acid (10%)	4
Sulfuric acid (30%)	4
Sulfuric acid (50%)	4
Isopropyl alcohol	5
Xylene	4
Ammonia (3%)	5
Gasoil	5
Methoxypropylacetate	5
Acetic acid (10%)	3
Bleach	5
Sodium hydroxide (40 g / L)	5
Acetone	two
Skydrol	5

### ADHERENCE TO VARIOUS SUBSTRATES

Surface	Adhesion (MPa)
Concrete	> 4.9



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### SUPPORT REQUIREMENTS

To obtain good penetration and adhesion, the support must always have the following characteristics:

1. Level
2. Cohesive / coct with a minimum resistance of 1.5 N / mm<sup>2</sup> (pull off test)
3. Regular and fine appearance
4. Free of fissures and cracks. If there are, they must be pre-treated.
5. Healthy, clean, dry, free of dust or remnants of loose materials or particles, superficial slurries and free of fats, oils and mosses.

### ENVIRONMENTAL CONDITIONS OF HUMIDITY AND TEMPERATURE

#### 1. For porous supports.

First coat, diluted 5% in water, 200-400 g / m<sup>2</sup>  
Second hand, undiluted, 300-500 g / m<sup>2</sup>

The recommended temperature of the support for the application is between 15°C and 40°C. If the temperature is above 45°C, additional measures must be taken following the manufacturer's instructions. Low temperature and high humidity conditions are unfavorable for the curing of the product.

### SUPPORT PREPARATION

Concrete substrates must be prepared mechanically using an abrasive blast or scarifying to lift the surface and achieve an open pore.

The substrate is printed and leveled until a regular surface is achieved. Sharp irregularities are removed with a polisher. Remove all dust and loose material from the surface with a brush, broom and / or vacuum cleaner.

### MIXING OR HOMOGENIZATION

Shake and homogenize the two components with a low speed stirrer. The product turns into a milky white suspension. After application, the milky film becomes transparent in one to two hours, depending on temperature and thickness.

### APPLICATION

Apply by brush or roller.

In highly absorbent substrates, a diluted first coat can be applied as a pore cap, followed by a second undiluted coat. The recommended dilution in this case is 10 to 20% water.

On hot surfaces (exposed to the sun), it is recommended to pre-wet the surface before application.

An excess of product can cause problems due to the retraction of the resin when evaporating the water. For this reason, it is not recommended to exceed the recommended dose.

If at any specific point there are whitish stains of the product, these should be removed, before applying the subsequent layers.

### CONSUMPTION

Apply between 200 and 500 g / m<sup>2</sup> of undiluted product. Excess amounts can cause the appearance of veiled or whitish areas.

### DRYING TIME

500 g / m<sup>2</sup> application.

High temperatures and low humidity favor drying. Too high humidity conditions can cause the film not to lose its initial milky appearance.

Terms	Dry to touch (h)
25°C, 5%	6
25°C, 90%	10 (Milky)
35°C, 20%	two
6°C, 50%	> 100
-15°C	> 100 milky,

### REAPPLICATION

A second application can be made from the moment the first is dry to the touch, and within 24 hours.

### COMMISSIONING

In case of using the product as a primer for the subsequent application of polyurethane floors or waterproofing that are going to be exposed, it is recommended to read the moisture content of the already dry primer, in order to ensure the total evaporation of the water contained in this product, and thus avoid the subsequent formation of blisters.

### TOOL CLEANING

Component A can be cleaned with Rayston solvent. Component B and still liquid AB mixture can be cleaned with water.

### FAQ

issue	Question	Cause	Solution
The product remains blank	Too cold or wet	Slow reaction	Primer change

### MAINTENANCE

The use of certain solvents can damage the membrane

### SECURITY

The epoxy constituents of component A have potential for sensitization. Always follow the instructions on the safety sheet of this product and take the protection measures described therein. In general, adequate protection of the skin and eyes is mandatory. The product should be used only for its intended uses and in the prescribed manner.

This product should only be used for industrial and professional uses. Not suitable for DIY use.

### ENVIRONMENT

Empty containers should be handled with the same precautions as if they were full. Consider packaging as waste to be treated through an authorized waste manager. If the containers contain remains, do not mix them with other products without previously ruling out possible dangerous reactions. The remains of component A and B can be mixed in equal parts in order to convert them into an inert solid material but never in a volume greater than 5 liters at a time to avoid dangerous heat generation.

### ADDITIONAL INFORMATION

The information contained in this TECHNICAL SHEET, as well as our advice, both written and provided verbally or through tests, are given in good faith based on our experience and the results obtained through tests carried out by independent laboratories, and without serving as guarantee for the applicator, who should take them as merely indicative references and with strictly informative value.

We recommend studying this information in depth before proceeding to the use and application of any of these products, although it is especially convenient to carry out tests "in situ" to determine the suitability of a treatment in place, with the purpose and conditions concrete that occur in each case.

Our recommendations do not exempt from the obligation that the applicator has to know in depth, the correct method of application of these systems before proceeding to their use, as well as to carry out as many preliminary tests as appropriate if there is doubt as to their suitability for any work, installation or repair, taking into account the specific circumstances in which the product will be used.

The application, use and processing of our products are beyond our control and, therefore, under the sole responsibility of the installer. Consequently, the applicator will be solely and exclusively responsible for the damages derived from total or partial non-observance of the use and installation manual and, in general, from the inappropriate use or application of these products.



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# RAYSTON EPOXY H LV



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*This data sheet cancels previous versions.*



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