

## Two component aliphatic polyurethane binder for construction applications

### DESCRIPTION

2-component, aliphatic polyurethane resin, suitable for use as an aggregate stone binder. Designed for use as a binder for pavement applications that allows for a smooth floor, modern, tough, low maintenance, porous or semi-porous finish, depending on the type of aggregates used. The surface finish is a seamless, hard and resistant.

### TECHNICAL DATA

#### PRODUCT INFORMATION BEFORE APPLICATION

	Component A		Component B	
<b>Chemical description</b>	Polyol mixture		Solventless polyisocyanate	
<b>Physical State</b>	Liquid		Liquid	
<b>Presentation</b>	Metal container 4.5		Metal container 2.5	
<b>Non volatile content (%)</b>	approx 100		100	
<b>Flash point</b>	>100°C		>100°C	
<b>Colour</b>	Yellow		dark brown	
<b>Density</b>	<i>Temperature (°C)</i>	<i>Density (g/cm<sup>3</sup>)</i>	<i>Temperature (°C)</i>	<i>Density (g/cm<sup>3</sup>)</i>
	25	1,01	25	1,16
<b>Viscosity</b>	<i>Temperature (°C)</i>	<i>Viscosity (mPa.s)</i>	<i>Temperature (°C)</i>	<i>Viscosity (mPa.s)</i>
<b>Approximate values, Brookfield</b>	15	6000	25	2500
	25	2800		
	35	800		
<b>A/B mixing ratio</b>	A=100, B=55.5 by weight			
<b>Initial mixture properties</b>	Viscosity: 2800 mPa.s (25°C) Color: light yellow			
<b>Time of processing At 25°C</b>	20 minutes			
<b>Pot life</b>	<i>Conditions (100g)</i>	<i>Pot life (min)</i>		
	22°C, 40% rh	38		
<b>Storage Use before</b>	Keep between 10°C and 30°C protected from moisture. 12 months after manufacturing date, in its unopened container			

#### INFORMATION ON THE FINAL PRODUCT

<b>Final State</b>	Solid Polyurethane
<b>Colour</b>	Clear yellow
<b>Hardness (Shore)</b>	85A ISO 868
<b>Mechanical Properties</b>	Maximum elongation: 96% ISO 527-3 Maximum tensile strength: 6 MPa ISO 527-3
<b>UV Resistance</b>	Aliphatic-based polyurethane. Non yellowing
<b>Temperatures of use</b>	Stable between -15°C and 80°C.

### SUPPORT REQUIREMENTS

In order to achieve a good bonding, support must be:

1. Flat and leveled

2. Compact and cohesive (pull off test must show a minimum resistance of 1,5 N/mm<sup>2</sup>).
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.

Asphalt supports must be clean and dry. For more information on treatment of critical spots, consult our technical service.

Edges of the application can be finished with brick, stone, concrete, for a high quality finish.

### RECOMMENDED ENVIRONMENTAL CONDITIONS

Support temperature should be between 10°C and 25°C. At higher temperatures, specific precautionary measures must be taken. At lower temperatures, curing is very slow. Please follow manufacturer advice.

Support moisture should be less than 4%.

High temperature and moisture conditions can lead to bubbling/foaming. Preferred air conditions are 10-30°C and 30-80% rh

### RECOMMENDED COMBINATIONS

Aggregate/Pavistone 2k ratio is as follows

Aggregate type	Pavistone % (A+B)
Regular, smooth, big stone	3 to 5 %
Small particles, porous, irregular sizes	5 to 7 %

An advisable practice is to seal the upper surface with a thin coat of pure Pavistone 2k UV resin in order to prevent surface wearing off.

### APPLICATION GUIDELINES

Homogenize completely by gentle stirring before use.

After mixing, Pavistone 2k UV is added to the aggregate mass, using a suitable mechanical mixer. Mix for 2 minutes and spread immediately on the application site. It is important to wet thoroughly all the solids for the same length of time each batch in order to prevent color differences. See pot life data for details.

Spread evenly at the desired thickness on the surface using a flat spreader and press gently to obtain a smooth and compact surface.

Use the following table as a guide for consumption estimations.

Aggregate size	Desired pavement thickness (mm)	Pavistone+stone consumption kg/m <sup>2</sup>
6 to 10 mm	15	30
	20	40
	25	50
	30	60

Some aggregates contain a certain proportion of finer sands that impair adhesion of the main components. Use clean materials with suitable particle distribution.



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## **SECURITY**

Pavistone 2k UV, component B contains isocyanates. Always follow the instructions provided in the material safety data sheet and take the precaution described there. As a general rule, a suitable ventilation must be ensured and any skin contact avoided. 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.

## **ENVIRONMENT**

Empty containers must be handled taking the same precautions as if they were full. Containers must be considered as hazardous waste, to be transferred to an authorized waste manager. If there is some residual product in the containers, component A and B can be mixed, always according to the A/B ratio, and allowed to cure. Do not mix volumes bigger than 7 litres in order to prevent dangerous reactions.

## **OTHER INFORMATION**

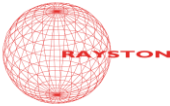
The information contained in this Technical Data Sheet, as well as our advice, both written as verbal or provided through testing, are based on our experience, and they do not constitute any product guarantee for the installer, who must consider them as simple information.

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 previous versions.***

# PAVISTONE 2K



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