

Two component 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

INFORMATION ON THE PRODUCT BEFORE APPLICATION				
	Component A		Component B	
Chemical description	Polyol mixture		Solventless polyisocyanate	
Physical state	Liquid		Liquid	
Packaging	Metal container 3.12 kg		Metal container 3.38 kg	
Non-volatile content	Approx 100%		100%	
Flash point	>100°C		>100°C	
Colour	Yellow		Colourless	
Density	Temperat ure (°C)	Density (g/cm ³)	Temperat ura (°C)	Density (g/cm ³)
	25	1.01	25	1.16
Viscosity	Temperat ure (°C)	Viscosity (mPa.s)	Temperat ura (°C)	Viscosity (mPa.s)
	25	4300	25	2500
A/B mixing ratio	A=100, B=108 by weight			
Mixture properties	Viscosity: 2800 mPa.s (25°C) Colour: light yellow			
Working time at 25°C	20 minutes			
Pot life	Conditions	Pot life (min)		
	22°C, 40% hr	55		
Storage	Between 10°C and 30°C, protected from moisture.			
Use before	12 months after manufacturing date.			

INFORMATION ON THE FINAL PRODUCT	
Final state	Solid polyurethane
Colour	Light yellow
Hardness (Shore)	85A (ISO 868)
Mechanical properties	Maximum elongation: 96% Maximum tensile strength: 6 MPa (EN ISO 527-1/3)
UV resistance	Aliphatic polyurethane. Does not yellow.
Use temperature	Stable between -15°C and 80°C.

SUPPORT REQUIREMENTS

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/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.

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 Pavistone2k UV resin 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 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 ²
	15	30
6 to 10 mm	20	40
	25	50
	30	60

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

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.

ENVIRONMENTAL PRECAUTIONS

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,

PAVISTONE 2K UV



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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.



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Page:

2/2