



Polyurethane binder

DESCRIPTION

One component liquid aromatic polyurethane composition. Suitable for recycled rubber crumb binding, SBR or EPDM, obtaining a compact and cost-effective elastomeric binder, for use in a variety of applications (running track fields, children play grounds, tramway noise dampening, etc.). Best suited for on-site applications.

- Low viscosity. Good wetting properties
- Low colour
- Good mechanical and elastic properties. Good tear resistance.

APPLICATION

- Tree pits
- Running track fields
- Decorative flooring
- Gardens
- Roundabouts
- Slopes
- Terraces
- Safety flooring
- Playgrounds
- Recreational areas
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ADVANTAGES

Elastic and seamless coating, weather resistant and excellent bonding. No reinforcement usually required except at critical points.

TECHNICAL DATA

INFORMATION ON THE PRODUCT BEFORE APPLICATION

Chemical description	Solvent based single-component aromatic polyurethane	
Physical state	Liquid	
Packaging	Metal containers, 25 kg, 200 kg	
Non-volatile content (%)	86-88%	
Flash point	27°C	
Available colour	Pigmented: red, green (other colours on request)	
Density	1.0-1.05 g/cm ³ (20°C)	
Viscosity	Approximate values	
approximate Brookfield	10	1700
	15	1275
	20	900
	25	660
	30	490
Pot life	3 h (1 kg, 20°C, 50% rh) 5 h (1kg, 5°C, 60% rh)	
Storage	Keep at a temperature below 35°C, away from moisture Product may be used up to 12 months after manufacture in its sealed original container.	
Use before	Product may be used up to 12 months after manufacture in its sealed original container.	
VOC	VOC content: 140 g/l Product subclass: I II Solvent based single-component performance products Limit from 01/01/2010: 500 g/l	

INFORMATION ON THE FINAL PRODUCT

Final state	Solid elastomeric membrane
Colour	Pigmented: red, green

Hardness (shore)	85A
Density of film	1.-1.1g/cm ³
Mechanical properties	Elongation: 190% Tensile strength: 6.1 MPa Tear strength: 6 N/mm
Uv resistance	A colour change is expected due to its aromatic polyurethane composition. This discolouration does not affect its mechanical properties.
Thermal resistance	Stable up to 80°C
Chemical resistance	Permanent contact. (0=worst, 5=best)

Chemical	Test conditions	Result
Water	24 h, 25°C	5
Salt water	24 h, 90°C	5
Hydrochloric acid solutions	200 g/l, 24 h, 25°C	4
	200 g/l, 2 h, 80°C	4
	3 g/l, 24 h, 25°C	5
	3 g/l, 24 h, 80°C	4
Sodium hydroxide	40g/l, 24 h, 25°C	5
Acetone	24 h, 25°C	1
Ethyl acetate	24 h, 25°C	3
Xylene	25 h, 25°C	5
Motor oil	24 h, 25°C	5
Brake fluid	24 h, 25°C	2

AMBIENTAL CONDITIONS

Support temperature should be between 10°C and 30°C. At higher temperatures, specific precautionary measures must be taken. Please follow manufacturer advice.

Air temperature must be between 10°C and 30°C. Support moisture should be less than 4% and less than 85% in the air.

High temperature and moisture conditions can lead to bubbling/foaming

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/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. Curing time is dependent on the environmental conditions.

APPLICATION GUIDELINES

Concrete supports must be prepared using an abrasive treatment and priming.

CURING TIME

Curing rate increases with temperature and humidity rises. The following table gives a rough estimation of the curing time under diverse conditions for a 200 microns coat.

Temperature °C	RH %	Dry to touch
24	60	30 min
10	75	75 min

RETURN TO SERVICE

At usual conditions, the flooring is resistant to light traffic after 48 hours.



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TOOL CLEANING

Liquid Spray Binder can be cleaned with Rayston Solvent. Once hardened, it cannot be dissolved..

SAFETY

Spray Binder contains isocyanates. Always follow the instructions provided in the material safety data sheet and take the precautions described there. As a general rule, a suitable ventilation must be ensured and all contact with skin prevented.. 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, do not mix it with other substances without checking for possible dangerous reactions.

OTHER INFORMATION

The information contained in this 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.