



Slow version of aromatic rubber binder for applications in conditions slightly elevated temperatures

DESCRIPTION

One component liquid aromatic polyurethane composition. Suitable for recycled rubber crumb binding, obtaining a coct 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

TECHNICAL DATA

INFORMATION ON THE PRODUCT BEFORE APPLICATION

Chemical description	100% solids single-component aromatic polyurethane										
Physical state	Liquid										
Packaging	Metal container 20 kg										
Non-volatile content	100%										
Flash point	>120°C (ASTM D 93)										
Colour	Light yellow										
Density	1,05 g/cm ³ (20°C)										
Viscosity	<table><thead><tr><th>Temperature (°C)</th><th>Viscosity (mPa.s)</th></tr></thead><tbody><tr><td>5</td><td>20000</td></tr><tr><td>15</td><td>7000</td></tr><tr><td>25</td><td>3000</td></tr><tr><td>35</td><td>1000</td></tr></tbody></table>	Temperature (°C)	Viscosity (mPa.s)	5	20000	15	7000	25	3000	35	1000
Temperature (°C)	Viscosity (mPa.s)										
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15	7000										
25	3000										
35	1000										
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										
Use before	Product may be used up to 12 months after manufacture in its sealed original container.										

INFORMATION ON THE FINAL PRODUCT

Final state	Solid elastomeric membrane
Colour	Yellowish
Hardness (Shore)	87A
Density of film	1,05 g/cm ³
Mechanical properties	Elongation: 190% Stress: 6.1 MPa
Tear strength	6,1 N/mm
UV resistance	A color change is expected due to its aromatic polyurethane composition. This discoloration does not affect its mechanical properties.
Thermal resistance	Stable up to 80°C

SUPPORT REQUIREMENTS

To achieve a good bonding, support must be:

- 1.Flat
2. Even and regular surface
3. Free from cracks and fissures. If any, they must be previously repaired.
4. Clean and dry, free of dust, loose particles, oils, organic residues or laitance.

RECOMMENDED 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.

APPLICATION GUIDELINES

Support must be cleaned and residues (dust, mold, etc.) removed. Apply by brush or spatula.

APPLICATION

Primer (Optional)

- Rubber Crumb Binder (RCB), 250-350 g/m², diluted with Solvent Rayston where needed.

Buffer layer (recommended 20 to 100 mm thick)

RCB mixed with recycled SBR rubber crumb (1 to 7 mm particle size) in the mixing ratio:

- SBR rubber: 100 parts
- RCB resin: 12-15 parts

For a 10-mm layer, use 8 kg/m² of the above mixture.

Specific thickness depends on the project requirements.

Sealing layer (recommended 10 to 20 mm thick)

- 12-24 hours after buffer layer

A mixture of:

- EPDM rubber (1-4 mm particle size): 100 parts
- RCB resin: 18 to 21 parts

For a 10-mm layer, use 8-10 kg/m² of the above mixture.

Note: to ensure colour stability, when using light coloured EPDM rubber, use Rayston RCB-581A instead of Rayston RCB-580S.

CURING TIME

Curing time is dependent on the environmental conditions. Curing rate increases with temperature and humidity rises. The following table gives a rough estimation of the curing time under diverse conditions for a 1 mm coat.

Temperature (°C)	Dry to touch (h)
15	>10
20	12
40	5,5

TOOL CLEANING

Liquid Rayston RCB-580S can be cleaned with Rayston Solvent. Once hardened, it cannot be dissolved.

SAFETY

Rayston RCB-580S contains isocyanates. Always follow the instructions provided in the material safety data sheet and take the precautions described there. As a 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



RAYSTON RCB-580S



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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.



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