RAYSTON SPRAY P5060

Sprayed, hot-applied modified polyurea membrane

DESCRIPTION

Rayston Spray P5060 is a hard protective coating specially formulated for expanded polystyrene (EPS) foam.
This product can only be applied by 2-component spraying equipment.

APPLICATION

- Covering EPS foam and phenolic foam, as an ict protection
- Industrial machinery and vehicle protection

PROPERTIES

- Hard-flexible membrane
- Fast curing
- Pigmentable

TECHNICAL DATA

INFORMATION ON THE PRODUCT BEFORE APPLICATION

	Component A	Component B
Chemical description	Polyol/Polyamine	Aromatic isocyanate prepolymer
Physical state	Líquid	Líquid
Packaging Note: Pigment is delivered in a third container. See Pigment Spray data sheet for specific details.	Metal container 183 kg 18,3 kg	Metal container 213 kg 21,3 kg
Non-volatile content (%)	approx 100%	100%
Flash point	>100ºC	>100ºc
Colour	Slightly yellow	Slightly yellow

Density

Temp (ºC)	Density (g/cm3)	Temp (ºC)	Density (g/cm3)
20	1.01	20	1,16
50	0,99	50	1.13

ViscosityApproximate

Temp (ºc)	Viscosity (m.Pas)	Temp(ºc)	Viscosity (m.Pas)
10	5500	10	570
20	1900	20	300
30	900	30	180
40	520	40	110
50	250	50	75
65	125	65	45

Mixing ratio A/B	A=1, B=1,14 by weight A=1, B=1 by volume
Density and viscosity of the mixture	Fast polymerization. See Pot life data
Colour	Clear yellow, but component A is pigmented by addition of pigment paste (Spray Pigment) delivered with each kit of Rayston Spray P5060
Pot life Approximate	Gel time mixture A+B (20 g) 7 s at 25ºC 4-5 s at 60ºC tack-free: 15-20s Time to sand: 10-15 minutes
Storage	Keep between 10º y 30ºC.
Use before	12 months after manufacture date,provided it is kept in its sealed container.

INFORMATION ON THE FINAL PRODUCT

Final state	Solid elastomeric membrane
Colour	Beige. Available Spray pigmentpastes are Gray RAL 7011. Tile red, Beige RAL 1001, blue RAL 5015. Other pastes under request.
Hardness Shore	60-65D (ISO 868)
Mechanical properties	Tensile strength: 24 Elongation at break: 108% Tear strength: 83.3 N/mm
UV resistance	Good resistance to UV-induced degradation. Aromatic polyureas undergo change of colour under sunlight. This change does not affect its mechanical properties. Additional UV protection can be achieved by application of an Impertrans or Colodur topcoat.

SUPPORT REQUIREMENTS

In order to achieve a good penetration and bonding, support must be:
1. Coct and cohesive enough.
3. Free from cracks and fissures. If any, they must be previously repaired.
5. Clean and dry, free of dust, loose particles, oils, organic residues and paints

Support temperature must be between 10ºC and 40ºC. At higher temperatures, additional measures to be advised by the manufacturer must be taken. Support moisture must be less than 4%.

MIXING

Stir and homogenize separately both components using suitable mixing equipment before being loaded into the machine. Add the required Pigment Spray to the A-component and stir before loading.
Recirculate both components while heating up to the required application temperatures.

APPLICATION GUIDELINES

Rayston Spray P5060 must be applied using a 2-component hot spraying equipment. Recommended temperatures are:

- Component A: 70ºC
- Component B: 70ºC

Pressure should be 130-150bar.
During application, check layer thickness and curing speed.

Spray Rayston Spray P5060 at 1 kg/m2. Thicker applications may lead to some cracking.

Wind speeds in excess of 25 km/h may result in excessive loss of exotherm and interfere with the mixing efficiency of the spray gun affecting polyurea surface texture, cure, and physical properties and will cause overspray issues.

Contact Krypton Chemical for more detailed technical information.

CURING TIME

Approximate hardness values are provided as reference only (1 mm, polypropylene support, 25ºC 50% RH)
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Time	Hardness shore D
15 min	36
2 hour	50
7 hours	57
14 hours	60
24 hours	61

REAPPLICATION

Needed thickness should be obtained in one single coat. A second coat is not recommended.

TOOL CLEANING

Solvent use for machine component cleaning is discouraged. A cleaning plasticizer fluid like Rayston Fluid is suitable. Component B must be completely removed from all air-exposed parts and replaced with this cleaning fluid.

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FAQS

PROBLEM	QUESTION	CAUSE	SOLUTION
The product does not cure	Is AB ratio correct?	Pressure differences	Check and correct machine operation
Bubbles or open pores	Porous support?	No primer unsuitable support	Apply a suitable primer before Rayston Spray P5060
No hiding power	Horizontal?	Too little product Too little pigment	Apply 1 kg/m2 Ensure full A+pigment homogeneization
Color change	Exposed to sunlight?	UV-reaction	Use a last coat in dark grey or red
	Can it be applied without pigmentation?		Use of pigment helps to obtain a uniformappearance.

SAFETY

Component B contains isocyanates. Always follow the safety instructions in the Material Safety Data Sheet. As a general rule, a good ventilation and/or respiratory protection is needed (combined organic vapour filtres+particles) along with protective clothing. This product must be used only for the applications here described. This product is intended for industrial and professional use. It is not suitable for DIY-type applications.

ENVIRONMENTAL PRECAUTIONS

Empty containers must be handled with the same precautions as if they were full. Treat empty containers as hazardous waste, and transfer them to an authorized waste manager. If the containers still have some material left, do not mix with other product with no knowledge of potential dangerous reactions. Component A and B may be mixed on a 1/1 ratio in order to get an inert material, but never do it in volumes larger than 5 litres in order to prevent a dangerous heat evolution.

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 studying 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 Technical Data Sheet supersedes previous versions.

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