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 impact 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	Polyol/Polyamine			Aromatic isocyanate		
description				prepolymer		
Physical state	Liqui	d		Liquid		
Packaging	Metal con	tainer		Metal container		
Note: Pigment	183 k	g		213 kg		
is delivered in	18,3 kg			21,3 kg		
a third						
container. See						
Pigment Spray						
data sheet for						
specific						
details.						
Non-volatile	approx 100%			100%		
content						
Flash point	>100°			>100°C		
Colour	Slightly y			Slightly yellow		
Density	Temperature	Density		Temperature	Density	
	(°C)	(g/cm ³)		(°C)	(g/cm ³)	
	25	1.01		25	1.16	
Viscosity	Temperature	Viscosity		Temperature	Viscosity	
	(°C)	(mPa.s)		(°C)	(mPa.s)	
	25	1900		25	300	
Mixing ratio A/B	A=1, B=1,14 by weight					
	A=1, B=1 by volume					
Mixture properties	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	Gel time mixture A+B (20 g)					
	7 s at 25°C					
	4-5 s at 60°C					
	Tack-free: 15-20 s					
	Time to sand: 10-15 minutes					
Storage	Keep between 10° y 30°C.					
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	Available colours: light grey, dark grey, rust red, blue			
	(may darken during storage and exposure to sunlight).			
	Other colours under request.			
Hardness (Shore)	60-65D (ISO 868)			

Mechanical	Tensile strength: 24 MPa		
properties	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

To achieve a good penetration and bonding, support must be:

- 1. Compact and cohesive enough.
- 2. Free from cracks and fissures. If any, they must be previously repaired.
- 3. Clean and dry, free of dust, loose particles, oils, organic residues, and paints.

Support temperature must be between 10 $^{\circ}\text{C}$ and 40 $^{\circ}\text{C}$.

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: 70°C
- Component B: 70°C

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 more than 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, 25°C 50% RH)

Time	Hardness (Shore D)		
15 min	36		
2 hour	50		
7 hours	57		
14 hours	60		
24 hours	61		



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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.

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 uniform appearance.

SAFETY

Component B contains isocyanates. Always follow the safety instructions in the Material Safety Data Sheet. As a rule, a good ventilation and/or respiratory protection is needed (combined organic vapour filters + 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 potentially dangerous reactions. Component A and B may be mixed on a 1/1 ratio to get an inert material, but never do it in volumes larger than 5 litres 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" 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

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This Technical Data Sheet supersedes previous versions.



Latest update:

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43890 - l'Hospitalet de l'Infant - Spain Tel: +34 977 822 245 - Fax: +34 977 823 977 www.kryptonchemical.com - rayston@kryptonchemical.com

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