

COLODUR ECO SATIN

RAYSTON
products



Aliphatic water-based polyurethane resin

DESCRIPTION

Colodur Eco Satin is a waterborne high performance aliphatic polyurethane resin. It cures giving hard and flexible floor coatings, abrasion resistant. It provides a surface protection for heavily used floorings. This material does not discolour upon sunlight exposure, making it suitable for outdoor applications. Being almost solventless, it can be used in public areas with no need to close them.

APPLICATION

- Parking decks
- Industrial flooring.
- Tennis courts and recreational areas.
- General concrete flooring
- Sealing and surface protection of epoxy, polyurethane or cementitious self-leveling products.

CERTIFICATIONS

EN 13813 SR-B4,0-AR0,5-IR14,7

Applus Laboratory: Taber Abrasion test.

N.08/32309984.

Slip class: No. 10/1709-1861- 10101589-1262



TECHNICAL DATA

INFORMATION ON THE PRODUCT BEFORE APPLICATION

	Component A	Component B
Chemical description	Water-based polyol dispersion	Solventless aliphatic polyisocyanate
Physical state	Liquid	Liquid
Packaging	Plastic container	Metal container
(A+B pre-dosed kit)	12.6 kg	2.4 kg
	3.36 kg	0.65 kg
Non-volatile content	33%	100%
Flash point	>200 °C	>100°C
Colour	Milky white	Colourless
Density	Temperature (°C) Density (g/cm ³)	Temperature (°C) Density (g/cm ³)
	25 1,1	25 1,15
Viscosity	Temperature (°C) Viscosity (mPa.s)	Temperature (°C) Viscosity (mPa.s)
	35 350	35 500
	25 850	25 1000
	15 1200	15 1500
	5 2500	5 3400
VOC	<10 g/L	
(VOC class as per 2004/42 EC)	1% A, i	
Mixing ratio, A/B	A=100, B=19 by weight A=100, B=16 by volume	
Mixture properties	Density: 1.10 g/cm ³ (25°C) Viscosity: 800 mPa.s (25°C)	
Colour	Milky white	
Non-volatile content	48%	
Pot life approximate	Conditions (100g)	Pot life (min)
	20°C, 40% rh	180
	9°C, 60% rh	300
Storage	Keep between 10° y 30°C. Protect from frost.	
Use before	12 months after manufacture date	

INFORMATION ON THE FINAL PRODUCT

Final state	Solid polyurethane film	
Colour	Colourless	
Hardness (Shore)	55D	
Mechanical properties	Maximum elongation: 35% (EN ISO 527-1/3)	
Abrasion resistance	15 mg (500 cycles) 28 mg (1000 cycles) Taber, CS-10, 1000 g	
Chemical resistance	Surface contact, 24 hours, 25°C (5=ok, 0=not recommended)	
	Chemical	Results
	Water	5
	Isopropyl alcohol	0
	Xylene	0
	Hydrochloric acid (household d-type)	5
	Bleach	5
	Ammonia	1
	Sodium hydroxide (50%)	5
	Diesel	3
	Engine oil	5
	Concentrated acetic acid	0
	Hydrogen peroxide	0
	Methoxypropyl acetate	0
	Acetone	0
	Acetic acid (10%)	0
	Skydrol	5
	Coffee	4
	Lemon juice	5
	Coca cola	5
	Beer	5
UV resistance	Colour stable under sunlight	
Slip resistance	Quartz sand spreaded onto (0,4-0,9 mm) at 1 kg/m ³ : Class 3 (UNE EN 12633-2003) Class 1 without quartz sand	
Gloss	<10% (60°, 150 microns)	

SUPPORT REQUIREMENTS

Support must fulfill the following requirements:

- Cohesive strength: minimum 1,5 MPa.
- Compression strength: minimum 25 MPa.

Free from any vapour or water pressure. Support must also be clean, dry and free from poorly adhesive areas. Moisture content must be less than 8%. Recommended support temperature: 10°C to 30°C. If underlying moisture is suspected, use a suitable primer. Please contact Krypton Chemical for further information about primer types. New concrete slabs must be allowed to dry for three weeks before starting job. On porous substrates, it is recommended a prior sealing/primer coating. Direct application of Colodur ECO Satine on a porous substrate is not recommended because of the risk of excessive matting agent deposits on the surface.

ENVIRONMENTAL CONDITIONS

- Recommended air temperature: 10°C to 30°C
- Recommended humidity: Less than 80%.

Recently cured or applied membrane cannot meet moisture or liquid water because it can form white spots.



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SUPPORT PREPARATION

Concrete: Abrade, scarify or treat the surface with a diamond grinding machine or similar, and then applying enough quantity of a Rayston epoxy-type primer. Allow 12-24 hours drying time of the primer before resuming job.

MIXING

Mix before use component A. Pour component B in it and stir gently for 2 minutes. Transfer the mixture to a bigger container and check there is no unmixed product left.

APPLICATION

Use a suitable paint roller.

RECOMMENDED QUANTITIES

Apply up to 200 g/m² for each coat. Thicker applications can lead to blistering and/or loss of matting effect.

CURING TIME

Curing time depends strongly on the local conditions. Curing speed will increase with temperature and decrease with humidity. Following data refer to 200 g/m² applications.

Conditions	Touch dry (h)
20°C, 50% hr	5
20°C, 15% hr	4
5°C, 50% hr	25
5°C, 20% hr	35
5°C, 80% hr	60
35°C, 40% hr	2
35°C, 10% hr	1

RECOATING

When two coats are applied, the second one can be applied up to 24 after first one is dry to touch. Application afterwards requires prior sanding.

RETURN TO SERVICE

Light pedestrian traffic is allowed after 24 hours.

TOOL CLEANING

Component A and B can be cleaned with water. Cured product cannot be dissolved, unless special stripping products are used.

FAQs

Question	Answer
¿It can be thinned?	Use water, up to 15% of addition, in the A+B mixture, immediately after mixing. If thinning several cans, use the same amount in each to prevent colour and gloss variations.

MAINTENANCE

A daily water scrubbing is allowed. Caution: some solvents may seriously damage the surface.

SAFETY

Component B contains isocyanates. Always follow the instructions provided in the material safety data sheet and take the precautions described there. As a rule, 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. Sprayed application methods are not recommended due to health/safety

reasons. 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.

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 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" 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.