

COLODUR ECO MATT



Aliphatic water-based polyurethane resin

DESCRIPTION

Colodur Eco Matt 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

Suggested uses include:

- 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



CE	
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EN 13813 SR-B4,0-AR0,5-IR14,7	
Synthetic resin coating. Use according to the relevant Data Sheet.	
Fire resistance	B ₁
Emission of corrosive substances	SR
Water permeability	NPD
Wear resistance (BCA)	AR 0,5
Tensile strength	B 4,0
Impact resistance	IR 14,7
Acoustic insulation	NPD
Acoustic absorption	NPD
Thermal resistance	NPD
Chemical resistance	NPD

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 (A+B pre-dosed kit)	Plastic container 12.6 kg 3.36 kg		Metal container 2.4 kg 0.64 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	1,03	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 (VOC class as per 2004/42 EC)	<10 g/L 1% A, i			
Mixing ratio, A/B	A=100, B=19 by weight A=100, B=17 by volume			
Mixture properties	Temperature (°C)	Density (g/cm ³)	Viscosity (mPa.s)	
	25	1.05	800	
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	Several colours available. Please contact Krypton Chemical for further information.			
Hardness (Shore)	55D			
Mechanical properties	Elongation at break: 35%			
Abrasion resistance	15 mg (500 cycles)			
Taber, CS-10, 1000 g	28 mg (1000 cycles)			
UV resistance	Colour stable under sunlight			
Slip resistance	With quartz sand spreaded onto (0,4-0,9 mm) at 1 kg/m ³ : class 3 as per UNE EN 12633-2003			
Gloss	<10% (60°, 150 microns)			



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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

SUPPORT REQUIREMENTS

Support must fulfil 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 4%. Recommended support temperature: 10°C to 25°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 Matte 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.

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

Open the component a container. 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. dilute the product with 15% water.

APPLICATION

Use a suitable paint roller.

RECOMMENDED QUANTITIES

Apply up to 150 g/m² for each coat. Thicker applications can lead to blistering and/or loss matting effect. Extend the material with a 6 mm Teflon microfiber roller approximately with beveled edges, distributing the material from one end of the pavement to the other in the direction of product spillage with the same roller with the cross direction, we will distribute the material covering approximately 1.3m without overlapping the previous roll strip back to 1.35m overlapping less than 5 cm. Then change to a dry roller and extend the overlap slowly, check that there are no excess areas of material. If we want to achieve a surface without overlaps, always keep the edge of the application "fresh".

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 after 24 the first one is dry to touch. Application afterwards requires sanding of the first coat.

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 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.

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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" 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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