# **COLODUR ECO MATT**

# Aliphatic water-based polyurethane resin

### **DESCRIPTION**

Colodur Eco Matte 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





## TECHNICAL DATA

INFORMATION ON THE PRODUCT BEFORE APPLICATION					
	Compon	Component A		Component B	
Chemical	Water-base	Water-based polyol		Solventless aliphatic	
description	dispers	dispersion		polyisocyanate	
Physical state	Líqui	Líquid		Líquid	
Packaging		Plastic container		Metal container	
(A+B pre-dosed		12.6 kg 3.35 kg		2.4 kg 0.65 kg	
kit)	3.331	<b>n</b> y		0.05 i	<b>\</b> y
Non-volatile	33%	33%		100%	
content (%)					
Flash point	>200	>200 °C		>100°C	
Colour	Milky w	Milky white		Colourless	
Density	Temperature (°C)	Density (g/cm <sup>3</sup> )		Temperature (°C)	Density (g/cm <sup>3</sup> )
	25	1.03		25	1,15
		(clear)	-		



Viscosity	Temperature	Viscosity		Temperature	Viscosity
Approximate	(°C)	(mPa.s)		(°C)	(mPa.s)
Approximate	35	350		35	500
	25	850		25	1000
	15	1200		15	1500
	5	2500		5	3400
			-		

VOC	<10 g/L		
(VOC class as per	1%		
2004/42 EC)	A, i		
Mixing ratio A/B	A=100, B=19 by weight		
_	A=100, B=17 by volume		
Mixture properties	Temperature	Density	Viscosity
	(°C)	(g/cm³)	(mPa.s)
	25	1.05	800
Colour	Milky white		
Overall non-volatile content (%, by weight)	48%		
Pot life	Conditions (10	0g)	Pot life (min)
Approximate	20°C,40% h		180
	9°C. 60% hr		300
	,		
Storage	Keep between 10° y 30°C. Protect from frost.		

INFORMATION ON THE FINAL PRODUCT		
Final state	Solid polyurethane film	
Colour	Several colours available. Please contact Krypton Chemical for further information	
Hardness Shore	55D (Clear)	
Mechanical properties	Elongation at break: 35%	
Abrasion	15 mg (500 cycles)	
resistance	28 mg (1000 cycles)	
Taber, CS-10,		
1000 g		
UV resistance	Colour stable under sunlight	
Slip resistance	With quartz sand spreaded onto (0,4-0,9 mm) at 1	
	kg/m <sup>3</sup> : class 3 as per UNE EN 12633-2003	
Gloss	<10% (60°, 150 microns)	
Chemical	Surface contact, 24 hours, 25°C	
resistance	(5=ok, 0=not recommended)	

Chemical	Results
Water	5
Isopropyl alcohol	0
Xylene	0
Hidrochloric acid (househol	5
d-type)	
Bleach	5
Ammonia	1
Sodium hydroxide 50%	5
Diesel	3
Engine oil	5
Concentrated acetic acid	0
Hydrogen peroxide 10%	0
Methoxypropyl acetate	0
Acetone	0
Acetic acid 10%	0
Skydrol	5
Coffee	4
Lemon juice	5
Coca cola	5
Beer	5



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#### **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 mus 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 come into contact with 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 a 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 of matting effect.

Extend the material with a 6 mm teflon microfiber roller approx. 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 1.30 m without overlapping the previous roll strip back to 1.35. 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  $200 \text{ g/m}^2$  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.

#### <u>FAQS</u>

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 general 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" 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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