

# Dencryl™ B24

Fast curing puma binder for self levelling, medium soft floors, levelling layers and wear layers

## DESCRIPTION

Fast curing binder based on PUMA (polyurethane methacrylate) for making self-levelling floors, levelling layers and wear layers with a layer thickness of 1 to 5mm.

## ADVANTAGES

- High reactivity
- Fast curing
- Applicable at low temperature
- Gradation of anti-slip finish possible
- Different layer thicknesses possible
- Low viscosity
- Widely applicable by adaptation of fillers

## PREPARATION OF THE SUBSTRATE

It is not necessary to place a primer on existing **Dencryl™** systems before applying **Dencryl™ B24**. Tears, cracks, joints and other elements showing water leaks must be made fully water and leak proof. The surface must be mechanically pre-treated. This can be achieved by removing the dust by bullet- or sandblasting or by grinding the surface. Tiles are to be degreased well and grinded with a diamond blade. These treatments ensure that an open texture surface is obtained, to remove the cement skin from concrete and old remnants of coatings and adhesives. High pressure water jetting is possible but then the surface must dry

sufficiently before applying the primer. (Moisture content in the substrate:  $\leq 5\%$  moisture. Exception:  $\leq 10\%$  moisture if the primer **Dencryl™ P12** is used. Always apply the products on a clean surface, free from adhesion reducing materials such as dirt, oil, grease, old coatings or surface treatments, ... The parts of the surfaces to be coated that do not meet the requirements as described above (compressive strength, tensile strength, parts that are not well connected, ...) must be treated or removed and repaired according to a correct method and with products that are complementary to the substrate and the synthetic resin system to be installed. Remove any loose parts by brushing properly and remove dust with an industrial vacuum cleaner. The surface must be mechanically pre-treated. this can be achieved by removing the dust by bullet- or sandblasting or by grinding the surface. The degree of roughness for metal surfaces is SA 21/2. Remove rust by sandblasting. The surface must be dry and free of impurities such as grease, oil or dust. Galvanized steel is thoroughly cleaned in advance with water and soap or sandblasted. Degrease metal surfaces immediately after the mechanical preparation with SOLVENT MEK. After the SOLVENT MEK has fully evaporated, immediately apply a layer of **Dencryl™ P13** to prevent the steel from re-oxidizing.

## APPLICATION

Spread the mixture with a spatula, rake or toothed trowel. and immediately vent and level with a spiked roller. An anti-slip surface is obtained by fully broadcasting it with the desired type of granulate. (4 to 5 kg/m<sup>2</sup>). Processing time of **Dencryl™ B24** is 10 to 15 minutes.

## FINISHING

After one hour this layer can be covered with a **Dencryl™ Topcoat**.

## APPLICATION CONDITIONS

Conditions during the application and curing of the products. The recommended processing temperature for substrate, environment, material and products is between +5°C and +35°C. For temperatures lower than +5°C please contact **DENCOAT™**. Relative humidity: Max. 85% Dew point: The temperature of the substrate and of the not fully cured product must be at least 3°C higher than the dew point. Avoid condensation on the surface from the moment that the preparations start until the complete curing of the products. Ensure adequate ventilation and a low relative humidity during curing.

Product Data sheet

## 1. Scratch slurry (Use in systems B, C, D)

### Guideline recipe and batch quantities

Item	Component	Guideline recipe (% by weight)	Comments	Batch for 30 litre bucket
1	<b>Dencryl™ B24</b>	35 %		13.5 kg 13.5 litres
2	<b>Dencoat™ Floor Filler</b>	65 %		25.0 kg Approx. 18 litres
<b>Total:</b>		<b>100 %</b>	<b>Average consumption: 1.6 kg/m<sup>2</sup> per mm thickness</b>	<b>38.5 kg Approx. 24 litres</b>
3	<b>Dencryl™ Hardening Powder</b>	1 – 6 % related to item 1	See "Hardener dosages" table for quantities, C	135 – 810 g

## 2. Self-levelling coating 2 – 4 mm (Use in system D or as scratch slurry)

### Guideline recipe and batch quantities

Item	Component	Guideline recipe (% by weight)	Comments	Batch for 30 litre bucket	
1	<b>Dencryl™ B24</b>	35 %		14 kg	14 litres
2*	<b>Dencoat™ Floor Filler</b>	65 %	1 sack	25 kg	approx. 22 litres
<b>Total:</b>		<b>100 %</b>	<b>Average consumption: 1.6 kg/m<sup>2</sup> per mm thickness</b>	<b>39 kg</b>	<b>approx. 24 litres</b>
3	<b>Dencryl™ Hardening Powder</b>	1 – 6 % related to item 1	See "Hardener dosages" table for quantities	140 – 840 g	

For thin outdoor applications of 2 – 3 mm thickness please use 50/50 resin/filler mixtures with full quartz broadcast. **Dencryl™ Filler** is recommended.

## 3. Self-levelling coating 4 – 7 mm (Use in system D)

### Guideline recipe and batch quantities

Item	Component	Guideline recipe (% by weight)	Comments	Batch for 30 litre bucket	
1	<b>Dencryl™ B24</b>	30 %		16 kg	16 litres
2	<b>Dencoat™ Floor Filler</b>	70 %		35 kg	approx. 29 litres
<b>Total:</b>		<b>100 %</b>	<b>Average consumption: 1.7 kg/m<sup>2</sup> per mm thickness</b>	<b>51 kg</b>	<b>approx. 30 litres</b>
3	<b>Dencryl™ Hardening Powder</b>	1 – 6 % related to item 1	See "Hardener dosages" table for quantities	160 – 960 g	

### Special advice:

Because of the high elasticity, no hard materials may be used as the overcoat. If a hard top coat is nevertheless required for reasons of resistance to chemicals, e. g. **Dencryl™ S34** resin, the surface must be pre-sealed with a semielastic intermediate sealant (e. g. **Dencryl™ S31** resin). Extremely high spot stresses may result in slight indentations in the surface, but these are largely reversible.

### Characteristics of Dencryl™ B24 as delivered

Property	Measuring method	Approx. value
Viscosity at +20°C	DIN 53 015	1000 mPa·s
Flow time at +20°C, 4 mm cup	ISO 2431	135 – 165 sec.
Density D <sub>4</sub> <sup>20</sup>	DIN 51 757	0.98 g/cm <sup>3</sup>
Flash point	DIN 51 755	+10°C
Pot life at +20°C (100 g, 2 % pbw. hardening powder)		approx. 15 min.
Application temperature		+5°C to +30°C

### Characteristics of the self-levelling coating 4 – 7 mm

Property	Measuring method	Approx. value
Compressive strength	DIN 1164	25 N/mm <sup>2</sup>
Tensile strength in bending	DIN 1164	15 N/mm <sup>2</sup>
Specific weight		1.7 g/cm <sup>3</sup>

## Hardener dosages

Temperature	Hardening powder % pbw. *	Pot life approx. min.	Hardening time approx. min.
+5°C	6.0	20	60
+10°C	4.0	15	40
+15°C	3.0	15	40
+20°C	2.0	15	40
+25°C	1.5	12	30
+30°C	1.0	10	25

\* The quantity of hardening powder is always related to the quantity of resin.

<b>CE</b>	
DenCoat · Calle Paraguay 14/2 · 35204 Vigo · Pontevedra · Spain	
10 <sup>1)</sup>	
B22 - 001	
EN 13813 SR-AR1-B1,5-IR4	
Synthetic resins for internal uses (Application in accordance with the newest technical information)	
Reaction to fire:	E <sub>fl</sub>
Release of corrosive substances (Synthetic Resin Screed):	SR
Water permeability:	NPD <sup>2)</sup>
Wear resistance (Abrasion Resistance):	AR 1 <sup>3)</sup>
Bond strength:	B 1,5
Impact resistance:	IR 4
Sound insulation:	NPD <sup>2)</sup>
Sound absorption:	NPD <sup>2)</sup>
Thermal resistance:	NPD <sup>2)</sup>
Chemical resistance:	NPD <sup>2)</sup>

## CE-labelling

- 1) Last two digits of the year in which the ce marking was affixed.
- 2) NPD = No performance determined.
- 3) Refers to a smooth surface without broadcasting.

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