

## **Technical Data Sheet (TDS)**

Form No: 5.01 TDS Polan 590 Rev: 02 – 05/2018

Date 18 March 2019 **Page** 1 / 2

## Floor Systems / Polyurethane Floor Coatings

# POLAN® 590

Polyurethane Flexible Self-Levelling Coating

## Description

**Polyurethane** based, double component, **flexible**, **self-levelling floor coating** material with mechanical strength. Does not contain solvent.

#### **Application Areas**

- Indoor and outdoor
- Horizontal applications
- Hygienic places such as hospitals and laboratories
- Food and medicine industries

- Swimming and decorative pools
- Places exposed to heavy vehicle and pedestrian traffic, such as shopping malls, factories, ateliers, warehouses, cold storage rooms.

## **Advantages**

- Can be safely used indoor as it does not contain solvent
- Flexible, covers cracks on the surface
- Gives better results in surfaces that are exposed to resonance
- Forms a seamless and jointless surface, resistant to aging
- Resistant to salt water, solutions with salts, bases, diluted weak acids, gasoline and mineral oils
- Has high mechanical and abrasion resistance
- Hygienic, suitable for sterilised environments, does not require maintenance
- Easy to clean thanks to its smooth surface.

## Consumption

 $1.45 \text{ kg/m}^2$  for 1 mm dry film thickness (Varies depending on the absorption and roughness of the surface, and the application method. Do not consume less than  $0.7 \text{ kg/m}^2$ )

#### **Packaging**

Sets of 25 kg (A+B) tin cans

## **Technical Properties**

Components	A: Polyurethane resin, B: Hardener
Color	Standard RAL colors (Except metallic, phosphorous colors and colors beginning with 4000)
Mixture Rate	A: 20 kg, B: 5 kg
Mixture Density	1.45 ± 0.05 kg/L (23°C TS EN ISO 2811-1)
Compressive Strength	35 - 45 N/mm <sup>2</sup> (DIN 53504 TS 1967) 7 days
Flexural Strength	10 - 18 N/mm <sup>2</sup> (DIN 52371 TS 985) 7 days
Bond Strength by Pull-off	> 2 N/mm <sup>2</sup> (EN 1504-2) 7 days
Tensile Elongation	> 60% (DIN 53504 TS 1967) 7 days
Abrasion Resistance (Taber)	< 60 mg, 1000 cycle (EN 1504-2)
Impact Resistance	Class III (EN 1504-2)
Capillary Absorption and Water Permeability	w < 0.1 kg/(m <sup>2</sup> . h <sup>0.5</sup> ) (EN 1062-3)
Solid Content (Mixture)	By weight 100%, by volume 100%
Hardness (Shore D)	80 ± 5 (ASTM D 2240, DIN 53505)





## **Technical Data Sheet (TDS)**

Form No: 5.01 TDS Polan 590 Rev: 02 – 05/2018

Date 18 March 2019 **Page** 2 / 2

Pot Life	30 - 40 minutes (23°C, 200 g, DIN 16945)
Application Temperature	Between +10°C and +30°C
Dirt Pick-up Time	1 - 2 hours (23°C TS 4317)
Dry to Touch Time	5 - 7 hours (23°C TS 4317)
Time to Use	72 hours (23°C TS 4317)
Top Coat Time	No later than 24 hours from primer application (23°C TS 4317)
Complete Curing Time	7 days (23°C TS 4317)

<sup>\*</sup> Application instructions and technical data provided for the products are obtained in line with our experience and the tests are implemented according to international standards, under ambient temperatures of 23±2°C and ambient relative humidity conditions of 50%±5. Higher temperatures decrease while lower temperatures increase these durations.

