

# POLYUREA FLOOR COATING



Two-component polyaspartic paint of aliphatic polyurea



## PROPERTIES

New generation, high resistance, white or colored, two-component polyaspartic paint of aliphatic polyurea (cool polyuria) for floors, low odor. With strong adhesion to sound surfaces, it creates a uniformed (without joints) and high performance protective flexible membrane, with long-lasting resistance to UV radiation and excellent resistance to mechanical and chemical stresses. Particularly resistant to friction, acids and alkalis. Classified as product for surface protection of concrete surfaces per EN 1504-2.

## ADVANTAGES

- Zero water absorption
- Ease and speed of application
- Excellent workability and coverage
- Flexible but also hard surface
- High resistance to UV radiation, does not yellow over a long period of time and does not chalk
- Dries quickly, even at low temperatures
- Maintains its mechanical strengths at temperatures from -40°C up to +90°C

- Waterproofs capillary cracks on walls and floors
  - Excellent resistance to mold and algae formation
  - Durable against corrosive gases in the atmosphere
  - High resistance to abrasion and scratches.
- POLYUREA FLOOR COATING has an advantage over other solutions for floors, as it is easy to apply, dries quickly, requires short times for its final use and maintains its shade unchanged over time.

## APPLICATIONS

POLYUREA FLOOR COATING of DUROSTICK is ideal for the protection, painting and decoration of new concrete surfaces or already painted with epoxy or other painting systems, as long as they are well adhered. It is also applied on vertical, unpainted surfaces. The product is exceptionally suitable for frequently used business premises, car garages, car repair stores, logistic warehouses and generally heavy traffic areas,

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where high mechanical strength is required. It is applied indoors and outdoors.

### USE

#### 1. Surface preparation

The careful preparation of the substrate is critical and necessary for correct final results. To ensure the proper adhesion of POLYUREA FLOOR COATING, the surface must be sound, flat, clean and free of dust, oils, rust and loose paint. Remove any existing peeled paints, chalking of epoxy paints, cement residues, moss and fungi by grinding the surface. Clean the surface with a stiff broom or a high-performance vacuum cleaner. Fill all the voids and repair all the surface imperfections and cracks using the suitable repairing products of DUROSTICK.

Before the application, the moisture content of the substrate must not exceed 4%. The concrete category must be at least C25/30. The cement content in mortars must be 350kg/m<sup>3</sup> and at least 30 days must have passed from their construction. Absorbent cement surfaces are stabilized with the water-based epoxy primer, WATER-PROOF EPOXY PRIMER AQUA, diluted 10% with water. Painted surfaces with existing but well-adhered coatings should be lightly sanded with sandpaper and thoroughly cleaned before applying POLYUREA FLOOR COATING.

#### 2. Application

Once 6 to 24 hours have passed (depending on the foot traffic and weather conditions) from the primer application, thoroughly mix the two components in the predetermined mixing ratio. Stir component A before mix it with component B. Empty the content of container B into container A and mix using a low-rpm drill until the mixture is fully homogenized. Apply the mixed product in one or two coats, without any dilution, using a roller or a brush. Apply each additional coat, after the previous one is completely dry, within the next 12 hours. The final coat application yields a smooth surface.

### USEFUL TIPS

- Avoid applying the product in thicknesses over 0.5mm per coat
- Low ambient temperatures slow down the curing process, while high temperatures speed it up.

- Avoid applying the product in high humidity conditions (> 75%) or there is a chance of rain for the next 12 hours
- Do not wash the substrate with water before the application
- Full mechanical strength is given in 7 days from the application of the final coat of paint
- Avoid working the product over the freshly coated surface repeatedly with the application roller. Use a short pile mohair roller, suitable for varnishes and epoxy paints. For each new package use a new roll (after about 35 minutes of use)
- Once the product is fully cured, any application residues are removed by mechanical means
- only.
- For the creation of non-slip surfaces in places such as ramps or places that need safety of workers, it is recommended to use ANTISLIP ADDITIVE POWDER or QUARTZ SAND 0-3mm with application on the first layer of POLYUREA FLOOR COATING. Using a vacuum cleaner, we remove first any residues that are not stuck to the surface, and we apply a second layer of small thickness.
- After hardening, the product is harmless to health and the environment.

### CLEANING

Clean all tools and application residues with THINNER 201 of DUROSTICK, immediately after use.

### CONSUMPTION

170gr/m<sup>2</sup>/coat, on properly prepared surfaces

### STORAGE

Component A: Store in places protected from frost, humidity and sun, for up to 18 months from production date, and if it remains in its original hermetically sealed packaging.

Component B: Store in places protected from frost, humidity and sun, for up to 9 months from production date, and if it remains in its original hermetically sealed packaging.

### SAFETY DIRECTIONS

Component A: The product is classified as irritant and harmful. It is recommended to keep

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away from the reach of children. Before use, refer to the cautions on the product packaging or the Material Safety Data Sheet.

Component B: The product is classified as irritant. It is recommended to keep away from the reach of children. Before use, refer to the cautions on the product packaging or the Material Safety Data Sheet.

## PACKAGING

Metal container: 5kg (A: 4kg, B: 1kg)

Metal container: 10kg (A: 8kg, B: 2kg)



## DUROSTICK S.A.

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## TECHNICAL SPECIFICATIONS (Measurement conditions 23°C and 50% R.H.)

<b>Chemical base</b>	Two-component aliphatic polyurea
<b>SHADES</b>	
<b>WHITE</b>	
<b>RAL 7032</b>	Sand gray
<b>RAL 7035</b>	Light gray
<b>RAL 7040</b>	Gray
<b>RAL 3009</b>	Oxide red
<b>RAL 1015</b>	Beige
<b>RAL 1013</b>	Light beige
<b>RAL 6021</b>	Pale green
<b>RAL 5024</b>	Pastel blue
For more shades of the RAL color chart please contact with DUROSTICK central offices	
<b>Mixing ratio A:B</b>	4:1 by weight
<b>Working time</b>	35 minutes at 23°C
<b>Walkability</b>	After 6 hours, depending weather conditions (temperature, humidity)
<b>Full curing time</b>	7 days
<b>Application temperature</b>	From +3°C up to +35°C
<b>Temperature resistance</b>	From -40°C up to +90°C
<b>Capillary water absorption w per EN 1062-3</b>	w=0,006kg/m <sup>2</sup> .h <sup>0.5</sup>
<b>Permeability s<sub>D</sub> in CO<sub>2</sub> per EN 1062-6 (A method)</b>	s <sub>D</sub> >50mm
<b>Water vapour permeability s<sub>D</sub> per EN ISO 7783-2</b>	s <sub>D</sub> = 2,49m [class I, (s <sub>D</sub> <5m)]
<b>Adhesive strength per EN 1542</b>	2,5 N/mm <sup>2</sup> (requirement for flexible systems without walkability: 0,8 N/mm <sup>2</sup> )
<b>Impact resistance per EN ISO 6272-1</b>	20Nm (class III)
<b>Shore A hardness (ASTM D 2240)</b>	>70
<b>Shore D hardness (ASTM D 2240)</b>	>30
<b>Hydrolysis (5% KOH, 7 days)</b>	No significant elastomeric change

## Chemical resistance

Good: Acid and alkaline solutions (5%), common detergents, oils and seawater.

## V.O.C. (Volatile Organic Compounds)

Limit value of maximum content of V.O.C. per EU (Directive 2004/42/EC) for this product (category A/I: 'Two-pack performance coatings', Type SB): 500gr/lt (2010). The ready to use product contains maximum 180gr/lt V.O.C.