# IPA POLYSCHICHT 2 K (COATING SYSTEM)

# DISSIPATIVE, PLASTIC-MODIFIED POLYMER SILICATE WITH DIBT APPROVAL

## **Product Description:**

IPA Polyschicht 2K is a two-component, solvent-free coating system based on polymer-

/Silicate-based coating consisting of binder and hardener components. The coating can be made electrostatically dissipative.

#### Fields of application:

- "Systems with sealing surfaces according to § 62 WHG for handling liquid water-polluting substances
- " Sewer constructions
- "Wastewater engineering systems, e.g. pipes, shafts, digestion towers and flow channels
- "catchment areas of LAU and HBV installations
- " Separator plants for greases and light liquids
- " Collecting trays for chemicals
- " Plants with biogenic sulfuric acid contamination
- " Biogas plants

#### Features:

- "Resistant to waste water from pH O -14, chromic acid 35%, fuel oils, solvents, fuels, oils+greases, see resistance table "IPA Polyschicht 2K is solvent-free, water vapor diffusible and contains no VOC components.
- " has a high mechanical strength in the cured state
- " is resistant to biogenic sulfuric acid and thus prevents concrete corrosion
- " heat resistant up to 140°C
- " does not emulsify with water, water repellent immediately after application
- " complete curing even under water
- " crack-bridging up to 0.1 mm

# **Processing instructions:**

### **Underground:**

Concrete and all concrete repair mortars and steel surfaces.

#### Preparation:

Prepare the surfaces in accordance with DIN-EN 14879-1. Remove all loose parts and adhesion-disturbing substances, such as oil, grease or other material and coating residues down to the load-bearing substrate to ensure a good adhesive bond. Recommended surface tensile strength 1.5 N/mm²

#### For steel:

Standard purity SA 2  $\frac{1}{2}$  according to DIN 55928. The surfaces must be dry and 3°C above the dew point temperature. Relative humidity less than 80%.

# For mineral substrates:

The substrate must be visually dry. In the case of damp substrates or moisture penetration, seal or prepare with PL® mortar. Work on defects or roughness compensation with PL® mortar.

# Mixing process:

Mix IPA Polyschicht 2K resin and IPA Polyschicht 2K hardener as follows:

- "Use a paddle mixer (LX 300) for mixing.
- "Add approx. 500 ml of the hardener component slowly to the binder component while mixing intensively (1200-1500 rpm).
- "Then gradually add the remaining hardener quantity to the binder component within two minutes while continuing to mix intensively until a homogeneous mass is obtained.
- " Pour the homogeneous mass into a clean mixing container and continue mixing
- "After a total of at least 4 minutes of mixing, the material is ready for processing.

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#### Processing:

The mixed coating material must be applied to the prepared substrate with a total thickness of at least 2 mm by brushing (1-2 coats) or spraying. If the coating is applied by brush, the first coat consists of a thin undercoat, which is intensively worked into the substrate (in order to create a pore- and cavity-free, flawless bond to the substrate), followed immediately by a first coat of approx. 1 mm thickness. After a waiting time of at least 6 hours, max. 24 hours, the top coat can be applied to vertical and ceiling surfaces.

(Surface must be dry and free of adhesives) Horizontal surfaces must be sanded after the 1st coat. The substrate temperature during application and 72 hours thereafter should be at least +10°C, and not more than+ 25°C, the relative humidity should not exceed 80%. The material temperature should be at least + 12°C, and not more than 25°C. During the complete application and for another 4-6 hours the processed surfaces must be protected against rain, sunlight and condensate precipitation. Layer thickness min. 2 mm.

#### Dissipative coating:

If a conductive coating is required, a conductive tape is attached to the cured 1st coat and then the 2nd coat (conductive top coat) is applied.

#### Subfloor leveling:

If a substrate leveling is required, a powder can be added to the coating compound IPA Polyschicht 2K until a suitable, trowelable consistency is reached. In addition, 2 further coatings are required as indicated in the test certificate.

## Shade:

Black (conductive)

# Cleaning and disposal:

The tools can be pre-cleaned with water. Subsequent final cleaning is carried out with PL® Cleaner. Mix residual quantities and allow to cure - do not allow to enter the sewage system. Material residues and delivery containers must be disposed of in an orderly manner.

### Occupational Health and Safety:

Please wear protective clothing, safety goggles and protective gloves when working, avoid strong dust formation. Do not smoke, eat or drink during processing! In case of skin contact and splashes in the eyes, rinse immediately with clean water for at least 15 minutes. It is recommended to have an eye wash bottle with the sterile solution ready to rinse eyes thoroughly. Then consult an ophthalmologist immediately.

Please observe the safety data sheets and the regulations of the employers' liability insurance associations on handling.

# **TECHNICAL DATA**

	BINDING AID	HÄRTER
Material base	Pu polymer	Silicate
Color	Black	Transparent
Density 20° c g/m³	1,21	1,32
Density of the mixture 20 Cg/m <sup>3</sup>	1,25	
Packing size	6.8 kg bucket	4.2 kg canister
FRESH MORTAR		
Container processing time up to 20° C(depending on temperature)	approx. 15 - 20 minutes	
Processing tempera- ture	+ 8° C to + 25-c	
Layer thicknesses	At least 2 mm	
Mixing ratio	6.8 kg resin 1 4.2 kg hardener	
Material consumption	1.25 kg/m /mm²	
Delivery form	11 kg container {2k)	
Storage	6 months in unopened original container, dry at +5°C to 30 C°	
MECHANICAL VALUES		
Compressive strength	1 day 1 19.8 N/mm²	28 days 1 30.4 N/mm²
Flexural strength	1 day 1 7.1 N/mm²	28 days 1 14.2 N/mm²
Adhesive tensile strength	28 days approx. 3.4 N/mm <sup>2</sup>	

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