

# LEYCO®-POX 123

## CONDUCTIVE AND ANTI-STATIC SYSTEM MECHANICAL AND CHEMICAL RESISTANT

### Product Description

LEYCO®-POX123 is a high-build topping. It is used in LEYCO®-POX antistatic flooring system, consisting of LEYCO®-POX101 as primer and LEYCO®-POX112 as conductive coating.

### Uses

LEYCO®-POX123 is used as an antistatic coating system on non-conductive surfaces, e.g. concrete, mortar, cementations screeds etc. It is particularly suitable for operating theatres, hospitals, computer rooms, electronic products assembling plants, electronic laboratories, clean rooms, areas of electric and electronic appliances, explosives filling plants and stores, solvent bottling plants etc.

### Advantages

- High wear and abrasion resistance
- High chemical resistance
- Easy to clean
- Very good cost/benefit ratio
- Very simple application - from prepacked containers.

### Technical Data

**Standards:** DIN 51953, ANSI/UL 779, BS2044-2050, ISO 1853.

<b>Mixing ratio:</b>	A:B = 5:1 (by weight)
<b>Density:</b>	1,40 g/cm <sup>3</sup> (at 23 °C)
<b>Pot life:</b>	10 °C      100 min
	23 °C      50 min
	30 °C      25 min
<b>Over coating:</b>	8/24 min/max
<b>Viscosity:</b>	6mm 100 sec (DIN)
<b>Comp. Strength:</b>	40 N/mm <sup>2</sup>
<b>E-module:</b>	2600

**Stock life:** Pot life is highly dependent on temperature and size of batch. Already thickened material cannot be remixed by adding LEYCO®-THINNER.

**Storage/Shelf life:** Store in a cool, frost free and dry place. 12 months in originally sealed container.

### Application

#### Dosage

The entire contents of comp. B (hardener) should be poured into comp. A (resin) and be mixed thoroughly by a mechanical stirrer at about 400 r.p.m. Avoid wastage by not making up more material than can be comfortably applied during

#### Surface preparation

The substrate must be firm, clean, dry and free from all contamination. All loose particles and excess laitance should be removed by mechanical or chemical methods.

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## Product Data Sheet

Product No: 30.123

### Priming

Prime with LEYCO®-POX101 (self-levelling mortar) for levelling uneven concrete surface by mixing by weight 1 part LEYCO®-POX101 and 2-3 parts quartz sand 0.1 - 0.4 mm.

### Installation of copper tapes for earth connection

Self-adhesive or non self-adhesive copper tapes are applied to the cured LEYCO®-POX101 coating at a distance of about 20 cm parallel to the wall. One free end of this tape is connected vertically upwards to the ring main. For areas of up to 100 m<sup>2</sup> at least two earth connections should be applied opposite to each other and as far away from each other as possible, but not more than 10 m. In case the areas are divided by channels or expansion joints, each area must be earthed separately or be joined to the adjacent area with an electrically conductive copper tape or an fan-shaped 4 mm<sup>2</sup> copper strand (Figure 2). These connecting elements are placed loop like into the joints between two adjacent areas, into each of which they should protrude by 10 cm (Figure 2). Earth connections on the walls can be made by using plastic covered multi-strand copper cables of 20 cm instead of tapes. The plastic cover is stripped off, the copper wires are fanned out and fixed by glue or mechanical (Figure 1) to the tapes to conductive copper tapes . The other free end is electrically connected to the earth connection or the ring mains.

### Conductive Coating

Apply LEYCO®-POX112 to the prepared surface by brush or short-hair roller at the rate of 160 - 200 g/m<sup>2</sup>. In very hot weather, the consumption can be increased by 100 %. LEYCO®-POX112 and application of LEYCO®-POX123 coating is permitted after 16 hours at 20 °C. It is advisable to test the conductivity prior to application of LEYCO®-POX123. For this purpose, test electrode should be 10 m from nearest earth connection. The test result must not exceed 5 x10<sup>4</sup> ohm. If the resistance is higher, the test distances must be reduced by the installation of earth connections.

### Procedure of application of LEYCO®-POX antistatic and conductive system

- 1.0 Coating, independent of electrical characteristics of substrate
- 1.1 Preparation of surface - see above
- 1.2 Prime with LEYCO®-POX101 at the rate of 200 - 500 g/m<sup>2</sup>, depending on absorbance of substrate
  - 1.2.1 **In case of uneven surface:** Directly after priming with LEYCO®-POX101, apply self-levelling mortar consisting of 1 part LEYCO®-POX101 and 1 part quartz sand 0.1 - 0.2 mm Ø, plus 1.5 parts quartz sand 0.3 - 0.8mm Ø mm, by weight. Consumption approx.500 g/m<sup>2</sup>.
- 1.3 Earthen by copper tape and connected to the ring main as described above by copper-stranded wire.
- 1.4 Apply LEYCO®-POX112 as conductive coat at the rate of 160-300 g/m<sup>2</sup> by roller.
- 1.5 Perform conductivity. Test of LEYCO®-POX112 as described above.
- 1.6 After 24 hours, apply LEYCO®-POX123 at the rate of 2 kg/m<sup>2</sup> or more depending on requirements using notched trowel and remove entrained air by spiked roller.

**Acceptance of test:** The coating must be according to DIN 51953/4.3. Earth leakage must be between 104 and 106 ohm.

**Cleaning:** All tools should be cleaned thoroughly at frequent intervals during work using LEYCO®-THINNER. Simple immersion is not sufficient.

## Safety Instructions

### Safety precautions

Gloves, barrier cream or protective clothing should be used. Prolonged skin contact may cause irritation. If accidentally splashed into eyes, flush with plenty of water and seek medical attention immediately.

### Legal notes

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