TECHNICAL DATA SHEET

DEMCO PUR 4100 TOP COAT UVS ESD

ACRYLIC ALIPHATIC ESD POLYURETHANE TOPCOAT

DESCRIPTION

High-quality, two-component, acrylic aliphatic polyurethane-based ESD paint. It provides high resistance to UV radiation and atmospheric influences and delivers long-lasting protection and conductivity performance on steel structures, vehicle bodies and surfaces exposed to corrosion.

ADVANTAGES

- High abrasion resistance.
- Moves together with the surface it is applied to.
- Does not crack.
- Protects the applied surface against scratching, yellowing, and soiling.
- Thanks to its UV resistance, it does not dull or chalk.

APPLICATION AREAS

- Special machinery for ATEX areas and for preventing electrostatic charge build-up.
- Steel structures of industrial facilities.
- Vehicle bodies.
- Surfaces exposed to severe atmospheric corrosion and ultraviolet radiation.
- As a topcoat on ESD floor coatings (DEMCO PUR 3150 SELF-ESD).

PRODUCT INFORMATION

Packaging	Total Net: 20 kg (A: 16,00 kg / B: 4,00 kg)
Storage and Shelf Life	At 15 – 25°C, in dry, enclosed warehouses away from direct sunlight, in the unopened original packaging; 6 months.

TECHNICAL PROPERTIES

Number of Components	2
Mixing Ratio (by weight)	A/B (80/20)
Mixed Density (g/cm^3, 20°C) (TS EN ISO 2811-1)	1,40 ± 0,10
Pot Life (hours, 23°C, 100 ml) (DIN 16945)	Min. 4
Mixed Viscosity (mPas, 25°C) (EN ISO 3219)	400 – 600
Electrical Conductivity Value (100 V)* (DIN EN 61340-4-1)	10^6 Ω – 10^9 Ω

Drying Time (23°C) (TS 4317)	TOUCH DRY (HOURS)	3 – 5
	RECOAT TIME (HOURS)	8 – 24
	FULL CURE (WEEKS)	1

*These values may vary depending on environmental conditions (temperature and humidity) and the equipment used to take the measurements.

MECHANICAL PROPERTIES

Abrasion Resistance (mg) (Taber, CS17, 1 kg, 1000 cycles) (ASTM D 4060)	~ 30

APPLICATION INFORMATION

Coverage

A dry film thickness of 50 – 55 µm is achieved with a consumption of 0,150 – 0,200 kg/m² in a single coat.

Application Conditions

- Working area temperature must be 15°C – 30°C.
- The ideal substrate temperature is 15°C – 30°C. The temperature must never be below 10°C.
- For indoor and outdoor applications, substrate temperature, ambient temperature and ambient humidity must be taken into account.
- The relative moisture of the substrate must be below 4% and the ambient humidity below 65%.
- For 24 hours after application, the surface must not be touched or come into contact with water.
- During work, mix suitable quantities and continue working until the entire mix has been used up.
- When applied at 20 – 25°C, the product reaches full cure at room temperature in 7 days on average.

SURFACE PREPARATION AND APPLICATION

- Mixing: After mixing component A in its own container, pour the entire B component into component A and mix for at least 3 minutes until the two components form a homogeneous mixture. Mixing at low speed is recommended to prevent air bubbles from forming in the mixture.
- Surface preparation: Before application, substances that reduce adhesion (oil, dirt, cleaning agents, phosphate layers, etc.) must be removed from the surfaces to be coated; blast cleaning to Sa 2½ in accordance with ISO 8501-1 must be carried out, and a medium (G) roughness in accordance with EN ISO 8503-1 must be obtained.
- Application: The epoxy-based conductive primer DEMCO EPOX 2485 STEEL – CONDUCTIVE is applied to the prepared surface by brush, roller or airless spray. After 12–16 hours, DEMCO PUR 4100 TOP COAT UVS ESD is applied evenly over the entire surface by brush, roller or airless spray at a uniform consumption rate to obtain a homogeneous film.
- Thinner: Thin with Polyurethane Thinner PUR 1000 THINNER at max. 5 – 10%.
- After the primer coat has been applied, make sure that the primer surface has reached touch-dry hardness; depending on the ambient temperature, DEMCO PUR 4100 TOP COAT UVS ESD should be applied approximately 12–16 hours later.

SAFETY PRECAUTIONS

Avoid contact of the mixture or its components with skin and eyes; in case of contact, rinse with plenty of water and seek medical advice. Wear protective gloves, clothing and goggles, and keep the product out of the reach of children. Refer to the Material Safety Data Sheet (MSDS).

LEGAL NOTES

The above information has been prepared for professional users on the basis of laboratory studies and field applications. For company-specific applications and new design work, we recommend consulting our Technical Service. Our company accepts no responsibility for work carried out under unsuitable conditions or outside our control.

This data sheet is a translation of the product's original data sheet (TR). In case of any discrepancy, the original version prevails.

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