

TELPOX PVB 100

Anticorrosive PVB primer two-component

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Composition Mixture of inorganic pigments and fillers in solution of medium molecular epoxy resin and PVB (polyvinyl butyral) in organic solvents with addition of Zn phosphate.

Characteristics and use The paint (wash primer) is determined for anticorrosive primers of metals, where it ensures perfect adhesion and anticorrosive protection of painting system. The paint suitable mainly for increasing adhesion to surfaces such as zinc, galvanised steel, aluminium and their alloys.

It is necessary to mix component A with component B before use and this mixture then etches the metals and forms a well-anchored layer between the substrate and other coatings. The anti-corrosion effect consists in inducing phosphatization and the action of passivating components. The primer is suitable for steel protection in highly exposed environments C3 to C5 according to ČSN EN ISO 12944-2.

TELPOX PVB 100 is recoatable with solvent-borne 1K and 2K paints (alkyd, polyurethane, epoxy).

- ◆ excellent adhesion to steel surfaces, stainless steel, light and non-ferrous metals (galvanized, aluminum, titanium zinc, copper)
- ◆ excellent adhesion to fresh galvanized iron
- ◆ excellent anticorrosive properties
- ◆ fast drying primer

Application area Exterior and interior with medium and high corrosive stress (production halls, laundry rooms, chemical plants) possibility to use especially on metal tanks, piping, machines, operating constructions, bridge constructions.

Shades 0110 grey, 0840 red brown

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|----------------------------|--------------------|---------------------------|
| Physical properties | Flow time | 70 – 100 s (cup Ford / Ø) |
| | Weight solids | > 38 % |
| | Volume solids | 20 % |
| | Flash point | 30 °C |
| | Density of product | ca 1100 kg/m ³ |

| | | |
|------------------------|---|-----------------|
| Emission limits | VOC: 0.62 kg/kg | TOC: 0.50 kg/kg |
| | This product is for professional use only. Not for DIY. | |

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|---------------------------------|-------------------------------|--------------------|
| Properties of cured coat | Hiding power | degree 2-3 |
| | Gloss / 60° | < 8 |
| | Hardness / Persoz | up 15 % after 24 h |
| | Adhesion with crosshatch test | degree 0 |

| | | | |
|--------------------|------------------------|--------|--------|
| Drying time | Surface temperature | 15 °C | 23 °C |
| | Dust free | 30 min | 20 min |
| | Dry through | 2 h | 1 h |
| | Dry film thickness DFT | 15 µm | 15 µm |

| | | | |
|---------------------------|--------------------------------|-----------------------|-----------------------|
| Spreading capacity | Wet film thickness WFT | 80 µm | 100 µm |
| | Dry film thickness DFT | 15 µm | 20 µm |
| | Theoretical spreading capacity | 12 m ² /kg | 10 m ² /kg |

Thinning TELSOL POX, BALTECH S6300

Hardening Mix component A with component B before use in weight ratio 15 : 1. The pot life of the mixture is 24 hour (20 °C). For mixing component A and component B use a non-metallic container!!

Component B Solution of phosphoric acid in organic solvent.

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Surface preparation For corrosive environment C2, C3 and C4 the surface must be prepared by blast-cleaning to degree Sa 2 ½ according to EN ISO 8501-1 (welds and edges must be prepared according to EN ISO 8501-3). Galvanized and aluminous surfaces must be treated according to EN ISO 12944-4, čl. 12.1. and 12.2. Hot sprayed (metallized) surfaces can be sealed directly with TELPOX PVB 100 in advance. For corrosive environment C1 the surface must be clean, dry, free of grease and rust, mechanically cleaned to degree St 2 – St 3. Galvanized surfaces must be cleaned with ammonia water or water containing detergent.

Attention: A direct adhesion cannot be taken as granted due to most different kinds of metals, alloys, metallic and conversion coatings and so on. The adhesion must therefore be tested on the original metal substrate.

Application conditions Stir the paint properly with a mechanical stirrer before use so that there will be no sediment on the bottom and mix with component B. To thin and filter if it necessary. For coating / spraying outside the suitable weather forecast is necessary. During rain, fog, creation of condensation water, effect of aggressive gases and during wind with strong content of dust the coating work must be suspended and can be restart after absolute drying of surface-treated material. Minimal air temperature for application is 10 °C, temperature of painted surface must be 3 °C above dew point. Temperature and relative humidity must be measured in proximity of painted surface. The surface temperature must not be higher than 40 °C. Relative humidity must not be higher than 75 %. Lower temperature and higher humidity during an application and a drying and high thickness of applied coats markedly slow down drying and hardening of the coat. Imperfectly dried surface can cause problems with adhesion of paint to surface or with adhesion between individual coats. In addition it can negatively affect overall appearance of the paint film.

Workflow Example of a coating system for corrosive environment C3 H:

1. apply 1x TELPOX PVB 100, recommended DFT max. 20 µm, recoatable after 2 h
2. apply 1-2x TELPUR S210/S210E, recommended DFT 120 µm

or

1. apply 1x TELPOX PVB 100, recommended DFT max. 20 µm, recoatable after 2 h
2. 2x TELKYD S200/S200 E, recommended DFT 160 µm

The paint is applied by cross spraying or in parallel strips to achieve a final uniform layer. First it is necessary to treat problematic places (corners, edges, welds, surface defects). It is very important to apply each coat in a uniform layer, in a thickness specified by the specific paint system. Consumption of paint must be checked to avoid excessive thickness, to avoid splashing, cracking and solvent retention.

Optimal thickness of system The optimal thickness and composition of the paint system depends on the aggressivity of atmosphere and on the expected durability of a protective system. The selection of an appropriate system should be in accordance with EN ISO 12944-5: 2018.

Application AirMix spraying (0 – 5 % thinning)
Conventional spraying (recommended viscosity 25 – 35 s / cup Ford Ø 4 mm; ca 10 % thinning)
Brush (recommended viscosity 60 - 80 s / cup Ford Ø 4 mm; 0 - 5 % thinning)

Application data **Data for conventional spraying**
Spraying gun e.g. EST 115, EcoGun 116, EcoGun 246
Nozzle according to desired capacity 1.2-1.6; Air pressure 2.5 – 3 atm.

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Data for Airmix spraying, e.g. EcoPump VP 55 310 in combination with air-assist spray gun EcoGun 2100 (DÜRR)

| Device | Nozzle | Pressure on nozzle | Thinning |
|--------|----------------------|---|----------|
| AirMix | 0,007 inch (0,18 mm) | 12-15 Mpa (120-150 atm) air assist 1.0-1.6 atm | 0-5 % |
| AirMix | 0,009 inch (0,23 mm) | 12-15 Mpa (120-150 atm) air assist 1.0-1.6 atm | 0-5 % |

Recommended filter of spraying gun yellow 100/149 (mesh/ μm), spraying angel 20 – 60°. It is not recommended using free adjustable nozzle.

Handling

Read the instructions in the Safety Data Sheet before use and follow all safety instructions and regulations. The product contains organic solvents. Follow basic hygiene rules. Do not eat, drink or smoke while using this product. Avoid contact with eyes, skin or clothing. Wear protective gloves, eye protection, protective clothing. Ensure effective ventilation of the workplace.

The component B (contents phosphoric acid) has caustic effects, causes severe skin burns and eye damage. If on skin, remove contaminated clothes and wash immediately skin with plenty of soap and water. If inhaled, terminate the exposure immediately and move the affected person to fresh air. If in eyes, rinse eyes thoroughly with a flow of running clean water for 10 to 15 minutes; remove contact lenses. No neutralization should be performed in any case! If swallowed DO NOT induce vomiting, rinse mouth with water. If health problems occur or in case of doubt and in case of accidental ingestion and contact with eyes, always contact a doctor immediately. Follow the first aid instructions given in the safety data sheet.

Packing

Component A: 935 g; 4 kg; 9.3 kg
Component B: 65 g; 0.3 kg; 0.7 kg
Twin A+B: 1000 g; 4.3 kg; 10 kg

Storability

The product keeps the product qualities 24 months from production date in original closed container. To store in dry storage at the temperature 5 to 25 °C. Flammable liquid II. hazard class.

Disposal of packing and waste

Hand over the used, properly empty packing at the collection point of the packing waste. Dispose the packing with the product rest at the place determined by the town for disposal of hazardous waste or hand over to the person authorized for hazardous waste disposal. Further see the product safety data sheet.

These data are only for information and their accuracy is influenced by the properties of individual materials and unpredictable factors during application. The user is responsible for correct use of the product according to the direction for use and for correct application of painting system, i.e. he must always evaluate all conditions of application, which could influence final quality of the top treatment. Therefore we always recommend to the user to carry out the test for actual working conditions and type of surface applied. Above mentioned data are data, which influence individual working conditions and therefore they do not establish a legal claim. It is necessary to consult information outside the terms of this catalogue sheet with the producer.

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