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## Composition

Mixture of pigments, fillers and Zn phosphate in solution of low molecular epoxy resin in organic solvents.

## Characteristics and use

The paint is determined for protective anticorrosive coating of steel surfaces and for protective coating of mineral surfaces. It is not suitable for coating of glazed or monolithic concrete surfaces. Coating with paint TELPOX S 200 is resistant to influence of many chemical substances, humidity and mechanical wearing. The coat is not resistant to environmental effects, due to weather the premature flouing of surface can occur.

The final properties of coat are achieved after complete maturing ca. 7 days. If the coat is not fully cured, it must not be treated mechanically or chemically. The paint is mixed with the hardener properly before use in specified ratio.

- ◆ excellent adhesion to steel and mineral surfaces
- ◆ high chemical and mechanical resistance
- ◆ resistant to dry heat 70 – 120 °C
- ◆ suitable for the tinting system HOSTEMIX
- ◆ it stays on vertical surfaces
- ◆ TELPOX S200 is suitable for **direct** food contact (selected shades)
- ◆ TELPOX S200 meets the requirements on anti-slip surfaces when dry

## Application area

Interior (due to environmental effects the coat flouing and gloss loss can occur), e.g. metal tanks, reservoirs for oil and fuels, piping, machines, washable surface of walls, coating of concrete floors, operating constructions.

## Shades

According to BALT, RAL, NCS and ČSN colour chart and the others according to individual customer requirements.

## Physical properties

Flow time	120 - 160 s (cup Ford Ø 6 mm)
Weight solids	> 71 % (not hardened mixture)
Weight solids	≥ 68 % (hardened mixture)
Volume solids	55 % (hardened mixture)
Flash point	24 °C
Density of product	1300 - 1550 kg/m <sup>3</sup>
Density of hardened mixture	1200 - 1350 kg/m <sup>3</sup>

## Emission limits

VOC: 0.32 – 0.37 kg/kg of hardened mixture	TOC: 0.28 – 0.33 kg/kg of hardened mixture
This product is for professional use only. Not for DIY.	

## Properties of cured coat

Hiding power	degree 1 - 2
Gloss / 60°	40 - 60
Hardness / Persoz	up 30 % in 5 days
Water-vapour transmission properties	class I S <sub>D</sub> < 5 m (EN ISO 7783)
Liquid water permeability	w3 – low ( ≤ 0,1 kg/(m <sup>2</sup> .h <sup>0.5</sup> ) (EN 1062-3)
Surface finish adhesion of building structures to the base	> 2,0 N/mm <sup>2</sup> (ČSN 73 2577)
Slip/skid resistance of a surface	complies with requirements



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**Chemical resistance**

Medium	resistance to liquids (EN ISO 2812-1)
20 % NaOH	resistant
20 % H <sub>2</sub> SO <sub>4</sub>	resistant
Diesel	resistant
Gasoline 98	resistant
Gasoline 95	resistant
Hydraulic oil	resistant
Engine oil	resistant
Ethyl alcohol	resistant (short term exposure)
Triethanolamin	resistant

**Drying time**

Surface temperature	10 °C	23 °C	23 °C
Dust free	TELHARD POX	< 2.5 h	< 1.5 h
	TELHARD POX RAPID	< 1.5 h	< 1 h
Dry through	TELHARD POX	24 h	10 h
	TELHARD POX RAPID	16 h	7 h
Dry film thickness DFT	40 µm	40 µm	120 µm

**Spreading capacity**

Wet film thickness WFT	75 µm	150 µm	220 µm
Dry film thickness DFT	40 µm	80 µm	120 µm
Theoretical spreading capacity	10 – 11.5 m <sup>2</sup> /kg	5 – 5.8 m <sup>2</sup> /kg	3.4 – 3.8 m <sup>2</sup> /kg

**Thinning**

TELSOL POX, BALTECH S6300, to thin after hardening.

**Hardening**

Hardener: TELHARD POX, TELHARD POX RAPID

**Mixing ratio:** 100 weight parts TELPOX S200 : 25 weight parts TELHARD POX.  
100 weight parts TELPOX S200: 11 weight parts TELHARD POX RAPID

For TELHARD POX the pot life of the hardened mixture is 8 hours (20 °C). For TELHARD POX RAPID the pot life of the hardened mixture is 2 hours (20 °C).

**Shade stability**

Epoxy coatings have after the application a tendency to get yellow. This has no effect on technical parameters.

Hardener TELHARD POX and especially TELHARD POX RAPID during storage, they tend to get dark and can therefore influence the shade of the mixed product. This has no influence on the protective properties of the system.

**Thermal resistance**

Thermal resistance of the cured coat: up to 120 °C: without restrictions, the hardness of the coating film gradually increases during long-term loading and the flexibility decreases. At temperatures of 120 °C to 150 °C, visual changes, gradual increase in hardness, decrease in flexibility and embrittlement of the coating film may occur.

**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).

For corrosive environment C1 the surface must be clean, dry, free of grease and rust, mechanically cleaned to degree St 2 – St 3.

Mineral surface must be matured (min. 30 days), compact, free of dust, grease, remains of petroleum products and asphalt and other impurities. The surface must be insulated against moisture.

It is necessary to clean, degrease and remove poorly adhering old coats from previously painted surfaces. To ensure compatibility of new coat with old one it is recommended to contact the producer or carry out test reference coating on surface of 1 m<sup>2</sup>.

**Application conditions**

Stir the paint properly with a mechanical stirrer before use so that there will be no sediment on the bottom and harden. To thin and filter if it necessary.

The temperature of the paint itself should be 15-25 °C. If the paint temperature is below 15 °C, a higher dilution is required and this can subsequently cause problems with the formation of a homogeneous paint film and a longer drying time.

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.

At lower temperatures, it is only possible to use TELHARD POX RAPID hardener.

**Workflow**

Apply 1 to 2 coats by spraying with two-component epoxy single coat TELPOX S200. Recoating is possible after 24 hours of drying (20 °C). Drying and maturing of coat can be accelerated by drying at the temperature 60 – 100 °C during 60 – 30 minutes. The final dry film thickness must be at least 120 µm. Mineral surface must be penetrated (strengthen) (it is possible to use hardened TELPOX S200 thinned with thinner TELSOL POX in ratio 1:2 or with hardened varnish EPOLEX S1300 thinned with thinner TELSOL POX in ratio 1:1).

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.

For larger compact areas always use the material from the same batch. Using the same batch can guarantee the same shade of the colour. We recommend to mix the content of the individual cans by homogeneous mixing.

**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**

Airless/AirMix spraying (10 – 20 % thinning depending on type of device)

Conventional spraying (recommended viscosity 25 – 35 s / cup Ford Ø 4 mm; 10 – 25 % thinning)

Roller (velour) (recommended viscosity 50 - 80 s / cup Ford Ø 4 mm; 10 - 15 % thinning)

Application by brush is recommended only for small areas and for corrections (10 – 15 % thinning).

**Application data**

**Data for conventional spraying**

Spraying gun e.g. EST 115, EcoGun 116, EcoGun 246

Nozzle according to desired capacity 1.4-2.0; Air pressure 2.5 – 3 atm.

**Data for airless spraying Airless/AirMix** (tested on the device EcoPump VP 55 445, 64:1 gear ratio, in combination with air assist spraying gun K 90 (Airless) or EcoGun 2100 (AirMix) (DÜRR))

Device	Nozzle	Pressure on nozzle	Thinning
AirMix	0.011 inch (0.28 mm)	15-20 Mpa (150-200 atm) air assist 1.5-2.5 atm	10-20 %
AirMix	0.013 inch (0.33 mm)	15-20 Mpa (150-200 atm) air assist 1.5-2.5 atm	10-20 %
Airless	0.011 inch (0.28 mm)	15-25 Mpa (150-250 atm)	10-20 %

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Airless	0.013 inch (0.33 mm)	15-25 Mpa (150-250 atm)	10-20 %

Recommended filter of spraying gun yellow 100/149 (mesh/  $\mu\text{m}$ ), 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. For larger compact areas always use the material from the same batch. Using the same batch can guarantee the same shade of the colour. We recommend to mix the content of the individual cans by homogeneous mixing.

### Packing

0,96 kg; 8 kg (tinted, not hardened product)

### Storability

The product keeps the product qualities 5 years 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.

The producer stipulates the right for the change in the catalogue sheets without previous notification.