

TECHNICAL DATA SHEET

TELPOX P 110

Two-component epoxy anticorrosive zinc primer

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Composition

Mixture of zinc dust in solution of medium molecular epoxy resin with addition of additives.

Characteristics and use

The paint is determined for prime coats of painting systems (epoxy and polyurethane) of steel surfaces, where there are high requirements for anticorrosive protection. After drying the paint TELPOX P 110 provides anticorrosive coat able to protect steel painted by the cathodic way. Before use the paint is mixed properly with the hardener in specified ratio.

- ♦ excellent adhesion to steel surfaces
- cathodic protection of steel
- suitable for environment with high corrosive stress
- ♦ suitable for indirect food contact

Application area

Exterior and interior with medium and high corrosive stress (production halls, laundry rooms, chemical plants) possibility to use especially on steel blasted constructions, bridges, pylons, halls, metal piping.

Shades

0110 - grey

Physical properties

Flow time	immeasurable, viscose liquid
Weight solids	ca 90 %
Volume solids	60 % (hardened mixture)
Flash point	24 °C
Density of product	3600 kg/m ³
Density of hardened mixture	3200 kg/m ³

Emission limits

VOC: 0.10 kg/kg of hardened mixture	TOC: 0.08 kg/kg of hardened mixture	
This product is for professional use only. Not for DIY.		

Properties of cured coat

Hiding power	degree 1
Gloss / 60°	< 8
Hardness / Persoz	up 25 % after 24 h
Adhesion with crosshatch test	degree 0

Drying time

Surface tempera	ature	10 °C	15 °C	23 °C	23 °C
Dust free	TELHARD POX	2 h	1.5 h	20 min	30 min
	TELHARD POX RAPID	1 h	30 min	15 min	
Dry through	TELHARD POX	5 h	3 h	1.5 h	2 h
	TELHARD POX RAPID	5 h	2 h	1 h	
Dry film thicknes	ss DFT	30 µm	30 µm	30 µm	60 µm

Spreading capacity

Wet film thickness WFT	70 µm	135 µm	200 μm
Dry film thickness DFT	40 µm	80 µm	120 µm
Theoretical spreading capacity	4.7 m ² /kg	2.4 m ² /kg	1.6 m ² /kg

Thinning

TELSOL POX, S 6300, to thin after hardening.

Hardening

Hardener: TELHARD POX, TELHARD POX RAPID

Mixing ratio: 100 weight parts TELPOX P 110: 5 weight parts TELHARD POX.

100 weight parts TELPOX P 110: 2 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 1 hour (20 °C).

Surface preparation

For corrosive environment C3, C4 and C5 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).



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Interval between blasting and coating must be as shortest as possible, maximally 4 hours in exterior and 8 hours in workshop. If shop primer were applied on previously blasted surface, they must be removed again by blasting before the coating. The same procedure must be carried out when "flash rust" occurs. For its removal the blasting must be repeated.

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.

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 coat of anticorrosive zinc primer TELPOX P 110. Drying 24 hours (20 °C), optimal dry film thickness of zinc primer should be approximately 60 - 80 μm.
- Apply 1 coat of two-component epoxy primer with iron mica TELPOX PM 150. Drying 24 hours (20 °C), recommended dry film thickness is 60 80 μm.
- 3. Apply 1 coat of two-component polyurethane enamel TELPUR T 330 HS. Thickness of one coat is $60 \ \mu m$.

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

Airless spraying (0 - 5% thinning)

Conventional spraying (recommended viscosity 25 – 30 s / cup Ford Ø 4 mm; 5 - 15 % thinning)

Brush (without thinning)

Application by brush is recommended only for small areas and for corrections.

Application data

Data for conventional spraying

Spraying gun e.g. EST 311, EST 314 or EST 115

Nozzle with bigger diameter, e.g. 23; Air pressure 3 - 3.5 atm.

Data for airless spraying, e.g. VYZA VARIO 56-45 (EST)

Nozzle	Pressure on nozzle	Spraying angle	Filter of spraying gun
0.015 inch (0.38 mm)	25 - 33 Mpa (250 – 330 atm)	20 – 60°	It is recommended to remove filters from the device.

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



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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.

Packing 20kg (not hardened product)

Storability The product keeps the product qualities 6 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.

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