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Composition Mixture of inorganic pigments and fillers in solution of polyester resin in organic solvents, hardened with aromatic polyisocyanate.

Characteristics and use The paint TELPUR P180 is determined for high build prime coats on metal and steel surfaces. Temperature during drying must not decrease under 10 °C, drying can be accelerated at the temperature 60 °C during 30 minutes. The paint is sandable after ca. 10 hours of drying at the temperature 23 °C.

Before use the paint is mixed properly with the hardener in specified ratio.

- ◆ excellent adhesion to steel surfaces
- ◆ quick drying
- ◆ excellent sandability A) version
- ◆ excellent anticorrosive properties
- ◆ it stays on vertical surfaces

Application area Exterior and interior with medium and high corrosive stress, e.g. chemical plants, industrial zones, coating of traffic devices.

Shades RAL 7035 grey, RAL 1014 ivory

Physical properties	Flow time	30 – 40 s / Ø 6 mm Ford
	Weight solids	ca 67 % (hardened mixture)
	Volume solids	ca 45 % (hardened mixture)
	Flash point	> 25° C
	Density of product	ca 1450 kg/m ³
	Density of hardened mixture	ca 1420 kg/m ³

Emission limits	VOC: 0.33 kg/kg of hardened mixture	TOC: 0.29 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°	< 20
	Hardness / Persoz	up 20 % in 2 days
	Adhesion with crosshatch test	degree 0

Drying time	Surface temperature	23 °C
	Dust free	15 min
	Dry through	4 h
	Dry film thickness DFT	40 µm

Spreading capacity	Wet film thickness WFT	100 µm	220 µm
	Dry film thickness DFT	50 µm	100 µm
	Theoretical spreading capacity	6.4 m ² /kg	3.2 m ² /kg

Thinning TELSOL PUR 3, BALTECH U6003, to thin after hardening.
Other diluents (especially those containing alcohols) can significantly slow down the curing mechanism of the chemical reaction.

Hardening **A) Use as 2K PUR sandable filler**

Hardener: TELHARD PUR P

Mixing ratio: 10 weight parts TELPUR P180 : 1 weight part TELHARD PUR P

The pot life of the hardened mixture is 20 minutes (20 °C). **This hardener is only suitable for use for application by conventional pneumatic spraying !!!**

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Do not allow material to remain in hoses, spray gun or spray equipment. Thoroughly and immediately flush all equipment with C 6000 thinner.

B) Use as a conventional 2K PUR anti-corrosion base

Hardener: TELHARD PUR

Mixing ratio: 10 weight parts TELPUR P180 : 1 weight part TELHARD PUR

The pot life of the hardened mixture is 1 hour (20 °C).

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).

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 m².

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.

Workflow

A) Use as a 2K PUR sandable filler - Application exclusively by conventional pneumatic spraying:

Workflow 1:

1. Apply 1 coat of two-component epoxide primer TELPOX P100. Drying 24 hours (20 °C), recommended dry film thickness is about 60 µm DFT.
2. Apply 1 coat of two-component polyurethane primer TELPUR P180. When using TELHARD PUR P hardener, the coating can be sanded after 10 h (20 °C), sandpaper P340. Recommended layer thickness 60 µm DFT. If it is necessary to use a higher DFT, it is recommended to apply 2 coats in a "wet into wet" system after 10 minutes.
3. Apply 1 or 2 coats of two-component polyurethane enamel TELPUR T360. Optimal dry film thickness of one coat is 40 µm (total 80 µm).

Workflow 2:

1. Apply 1 coat of two-component polyurethane primer TELPUR P180. When using TELHARD PUR P hardener, the coating can be sanded after 10 h (20 °C), sandpaper P340-P500 (P800 for perfect appearance). Recommended layer thickness 80 µm DFT. If it is necessary to use a higher DFT, it is recommended to apply 2 coats in a "wet-on-wet" system after 10 minutes.
2. Apply 1 or 2 coats of two-component polyurethane enamel TELPUR T360. Optimal dry film thickness of one coat is 40 µm (total 80 µm).

B) Use as a conventional 2K PUR anticorrosion primer - Application by Airless/AirMix spraying:

1. Apply 1 or 2 coats of two-component polyurethane primer TELPUR P180, drying at least 2 hours (20 °C). Application of individual layers is possible as well by the system "wet into wet" within 10 – 15 minutes. Recommended dry film thickness is 80 – 100 µm.

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2. Apply 1 or 2 coats of two-component polyurethane enamel TELPUR T360 or two-component polyurethane enamel TELPUR T340 HS. Optimal dry film thickness of one coat is 40 µm (total 80 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. It is not recommended to exceed twice the recommended film thickness.

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

- A)** Conventional spraying (5-15 % thinning)
B) Airless/AirMix spraying (5-15 % thinning depending on the type of device)

Application data

A) Data for conventional spraying

Spraying gun e.g. EST 315, EcoGun 116, EcoGun 246
 Nozzle according to desired capacity 1.4-1.8; Air pressure 1.5 – 3 atm.

B) 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 EcoGun 2100 (DÜRR))

Device	Nozzle	Pressure on nozzle	Thinning
AirMix	0.011 inch (0.28 mm)	12-18 Mpa (120-180 atm) air assist 1.0-2.0 atm	5-15 %
AirMix	0.013 inch (0.33 mm)	12-18 Mpa (120-180 atm) air assist 1.0-2.0 atm	5-15 %
Airless	0.011 inch (0.28 mm)	13-20 Mpa (130-200 atm)	5-10 %
Airless	0.013 inch (0.33 mm)	13-20 Mpa (130-200 atm)	5-10 %

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.

Packing

2,5 kg; 25 kg (not hardened product)

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.

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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.