



TELPUR S210 BS

Two-component polyurethane anticorrosive single coat

Page number: 01



Composition

Mixture of pigments, fillers, iron mica and Zn phosphate in solution of acrylic resin in organic solvents, hardened with aliphatic polyisocyanate.

Characteristics and use

The paint is determined for anticorrosive single coats of steel, especially for highly effective, decorative coats of blacksmith products for indoor and outdoor environments. When high corrosive stress is expected, it is recommended to use a suitable primer, eg. TELPOX P170. Before use the paint is mixed properly with the hardener in specified ratio.

The final properties of coat (including adhesion) are achieved after complete maturing in approximately 7 to 10 days.

- attractive metallic reflections
- excellent adhesion to steel surfaces
- quick drying
- ♦ paint 2 in 1 for cost-saving work
- it stays on vertical surfaces
- ◆ suitable for the tinting system HOSTEMIX

Application area

Exterior and interior with medium and higher corrosive stress. All kind of forging, restoration works, bars, gates, fences, railings, street lamps, wrought furniture, iron sculptures, steel parts.

Shades

According to BALT colour chart for this product.

Physical properties

Flow time	thixotropic
Weight solids	80 ± 2%
Volume solids	> 50 %
Flash point	> 25 °C
Density of product	ca 2000 kg/m ³
Density of hardened mixture	ca 1900 kg/m ³

Emission limits

VOC: 0.19 – 0.21 kg/kg of hardened mixture	TOC: 0.16 - 0.19 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	degree 5
Hardness / Persoz	up 12 % after 24 h

Drying time

Surface temperature	23 °C	23 °C
Dust free	25 min	30 min
Dry through	5 h	7 h
Dry film thickness DFT	40 μm	70 μm

Spreading capacity

Wet film thickness WFT	80 µm	160 µm
Dry film thickness DFT	40 μm	80 µm
Theoretical spreading capacity	6.5 m ² /kg	3.3 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

Hardener: TELHARD PUR

Mixing ratio: 20 weight parts TELPUR S210 BS: 1 weight part TELHARD PUR.

The pot life of the hardened mixture is 3 hours (23 °C).





TELPUR S210 BS

Two-component polyurethane anticorrosive single coat

Page number: 02



Surface preparation

For corrosive environment C2 and C3 the surface must be prepared by blast-cleaning to degree Sa 2 $\frac{1}{2}$ 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 rest, mechanically cleaned to degree St 2 – St 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 and can lead to reduced gloss or other irreversible surface defects such as graying and whitish haze. Both the paint and the object to be treated, as well as the surrounding environment, must have a suitable temperature. Condensation that occurs during or just after application can cause a matte finish and poor quality paint film.

If the paint film is prematurely exposed to standing water, the shade may change, especially in dark shades and at low temperature.

Thermal resistance

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

Workflow

Apply 1 or 2 coats (spraying) of TELPUR S210 BS, final dry film thickness should be at least 100 μ m. If necessary, recoating is possible after 20 minutes by the system so-called "wet into wet".

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.

When the paint is applicate by brush and roller, it is not possible to achieve the same aesthetic appearance as when the paint is applicate by spraying.

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/Airless spraying (5 - 15 % thinning depending on type of device) Conventional spraying (recommended viscosity 25-35 s / cup Ford \varnothing 4 mm; 15 - 25 % thinning) Brush and roller (velour) (recommended viscosity 60 - 80 s / cup Ford \varnothing 4 mm; 8 - 10 % thinning) Application by brush and by roller is recommended only for small areas and for corrections.



TECHNICAL DATA SHEET

TELPUR S210 BS

Two-component polyurethane anticorrosive single coat

Page number: 03



Application data

Data for conventional spraying

Spraying gun e.g. EST 115, EcoGun 116, EcoGun 246 Nozzle with bigger diameter, e.g. 2.0-2.3; Air pressure 2 – 2.5 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 EcoGun 2100 (DÜRR))

Device	Nozzle	Pressure on nozzle	Thinning
AirMix	0.013 inch (0.33 mm)	12-18 Mpa (120-180 atm) air assist 1.5-2.5 atm	5-15 %
AirMix	0.015 inch (0.38 mm)	15-20 Mpa (150-200 atm) air assist 1.5-2.5 atm	5-15 %
Airless	0.013 inch (0.33 mm)	15-20 Mpa (150-200 atm)	5-15 %
Airless	0.015 inch (0.38 mm)	17-25 Mpa (170-250 atm)	5-15 %

Recommended filter of spraying gun yellow 100/149 (mesh/ μ 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.

Packing

4 kg (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.