

# Temafloor PU

## DESCRIPTION

A solvent-free, elastic two-component polyurethane coating.

## PRODUCT FEATURES AND RECOMMENDED USES

- For new and old concrete and asphalt floors exposed to mechanical and chemical stress.
- Good resistance to abrasion.
- Elongation value approx. 60%.
- Withstands water, oils, greases, chemicals and dilute solutions of non-oxidizing acids, alkali and salt solutions. Resists only temporary splashes of oxidizing acids and bleaching chemicals.
- Withstands +80°C dry heat. Does not resist abrupt changes of temperature.
- Good impact resistance.
- Self-levelling, to be applied with serrated or steel trowel.
- Recommended for industrial and storage facilities, repair shops; e.g. air handling units, process or paper machine units and corridors.

## TECHNICAL DATA

### Volume solids

approx. 100%

### Specific gravity

1.4 kg / litre (mixture)

### Mixing ratio

Base	4 parts by volume	Temafloor PU
Hardener	1 part by volume	Temafloor PU Hardener

### Pot life (+23°C)

20–30 minutes on substrate, abt. 15 minutes in the mixing container.

### Practical coverage

Practical coverage depends on the porosity and evenness of the substrate and on the application method.

Film thickness 1 mm coverage approx. 1 m<sup>2</sup>/litre

Film thickness 2 mm coverage approx. 0.5 m<sup>2</sup>/litre

### Drying time (+23°C)

Dust dry after 6 hours

Foot traffic after 24 hours

Fully cured after 7 days

At lower temperatures the curing process will last longer.

### Thinners

Thinner 1061

### Cleaning of equipment

Thinner 1061.

### Finish

Full gloss.

### Colors

TVT 0229

Colors available on request: RAL 7035, RAL 7037, RAL 7040, RAL 7045, RAL 7047.

### Thinning instructions

Do not thin Temafloor PU polyurethane coating.

### Reaction to fire

B<sub>FL</sub>-s1 according to standard EN 13501-1

### VOC

VOC 2004/42/EC (cat A/j) 500 g/l (2010)

Temafloor PU: max. VOC < 500 g/l

### Can sizes

20,0 L, 200,0 L

# **Temafloor PU**

## **APPLICATION INSTRUCTIONS**

<b>Surface preparation</b>	<p>Always remove all grease, oil, and other impurities with Maalipesu detergent before grinding. Remove laitance or old peeling paint layers by power grinding, milling, or vacuum grit blasting. Choose the method best suited for the premises. Clean out pot holes removing all loose or brittle material. Open cracks with e.g. an abrasive tool. After mechanical pre-treatment remove all loose material and dust carefully with a vacuum cleaner.</p> <p>The substrate must have a tensile strength above 1.5 MPa. For application on cementitious leveling screed: check compatibility with the leveling screed manufacturer.</p>
<b>Application conditions</b>	<p>The relative humidity of the concrete should not exceed 97%. Residual moisture content should be below 4 weight-%. During application or drying, the temperature of the ambient air, surface or coating should not fall below +15°C and relative humidity of air should not exceed 70%.</p>
<b>Mixing components</b>	<p>First stir base and hardener separately. Mix the correct proportions of base and hardener thoroughly (approx. 2 minutes to get homogenous mixture) by using a low speed industrial hand drill with a paddle. Insufficient mixing or incorrect mixing ratio will result in uneven drying of the surface, weaken the properties of the coating and risk the success of the application.</p>
<b>Priming</b>	<p>Prime using Temafloor 400 or Temafloor 220W following the chosen product's PDS. Pour the primer onto the floor and apply as much as is needed to impregnate the concrete surface. If necessary, repeat priming to get a non-porous surface. A porous priming coat will result in holes and air bubbles in the finished coating. When using Temafloor 400 or 220W, subsequent treatment can be carried out after 2 hours using "wet-on-wet" technique.</p> <p>Asphalt floors should be primed by applying unthinned Temafloor PU with a suitable steel or rubber trowel.</p>
<b>Patching</b>	<p>Patch pot-holes and cracks with unthinned Temafloor 400 epoxy varnish or Fontefloor EP Primer and dry, clean sand. Mixing ratio e.g. 1 part by volume of epoxy mixture and 1–2 parts by volume of sand of grain size Ø 0.1–0.6 mm. Sand the patched areas before overcoating, if necessary.</p> <p>Note! Concrete surface should always be primed before patching.</p>
<b>Topcoating</b>	<p>Overcoating should be done within 16–24 hrs after priming. If the primed surface is not overcoated within 24 hrs, it should be abraded. Pour the mixture onto the floor and apply it with a trowel and level with a roller. Control that the thickness of layer is correct by observing coating consumption and by measuring the film thickness. Recommended layer thickness is 1.0–2.0 mm. Use spiked roller to finish the surface approx. 10–20 min after application. Spiked roller helps removing air bubbles from the coating.</p> <p>Note! Add the remaining mixture to the next batch of the product, do not scrape it out of the container onto the floor.</p>

## **HEALTH AND SAFETY**

Containers are provided with safety labels, which should be observed. Further information about hazardous influences and protection are detailed in individual health and safety data sheets.

A health and safety data sheet is available on request from Tikkurila Oyj.

**For industrial and professional use only.**



## Temafloor PU

The above information is not intended to be exhaustive or complete. The information is based on laboratory tests and practical experience, and it is given to the best of our knowledge. The quality of the product is ensured by our operational system, based on the requirements of ISO 9001 and ISO 14001. As manufacturer we cannot control the conditions under which the product is being used or the many factors that have an effect on the use and application of the product. We disclaim liability for any damages caused by using the product against our instructions or for inappropriate purposes. We reserve the right to change the given information unilaterally without notice.

The product is intended for professional use only and shall only be used by professionals who have sufficient knowledge and expertise on the proper use of the product. The information above is advisory only. To the extent permitted by applicable law, we shall not approve of any liability for the conditions under which the product is being used or for the use or application of the product.

In case you intend to use the product for any other purpose than that recommended in this document without first getting our written confirmation on the suitability for the intended use, such use takes place at your own risk.

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## EN 1504-2:2004

The European harmonized product standard EN 1504-2:2004 defines the requirements for surface protection systems for concrete.

This product is tested and CE-labelled in accordance with the tables 1d, 1f and 1g in the appendix ZA.

CE	
0809	
Tikkurila Oyj Kuninkaalantie 1 FI-01300 VANTAA	
13	
0809-CPD-0773	
TIK-0534-5001	
EN 1504-2:2004	
Product for protection and repair of concrete structures – Coating.	
Permeability to CO <sub>2</sub>	$s_D > 50 \text{ m}$
Impact resistance	Class II: $\geq 10 \text{ Nm}$
Capillary absorption and permeability to water	$w < 0,1 \text{ kg/m}^2 \cdot h^{0,5}$
Abrasion resistance	$< 3000 \text{ mg}$
Reaction to fire	B <sub>f</sub> -s1
Adhesion strength by pull off test	$\geq 2,0 \text{ N/mm}^2$
Release of dangerous substances	NPD
Permeability to water vapour	Class II, $5 \text{ m} < s_D < 50 \text{ m}$
Resistance to severe chemical attack	Class II