

# Temabond ST 300

## DESCRIPTION

A two-component high-solids, modified tintable epoxy maintenance paint for demanding surfaces.

## PRODUCT FEATURES AND RECOMMENDED USES

- An ideal solution for maintenance painting due to its very good adhesion even to hand-prepared steel. As a high-solids product, the paint has lower VOC emissions than conventional epoxy paints
- Withstands immersion in water and can therefore be used e.g. on steel structures immersed in water or buried in soil. The product can also be used for painting hydro-power stations. As a CE-marked product, Temabond ST 300 is suitable for concrete surfaces
- The tintable Temabond ST 300 forms a very tight film with good chemical and abrasion resistance. The product is used for repainting and touch-up painting steel surfaces that are difficult to clean, such as bridges, cisterns and different types of steelwork and equipment in the wood-processing and chemical industries
- High film build properties, also by brush
- Can also be applied on old alkyd paint surfaces
- Can be used as a single coat paint
- Winter grade version Temabond WG 300 can be cured at lower temperatures
- Recommended for repairing of damages caused by transport or installation

## TECHNICAL DATA

### Volume solids

80±2% (ISO 3233)

### Weight solids

88±2%

### Specific gravity

1.5 kg / l (mixed)

### Mixing ratio

Base 1 part by volume Temabond ST 300  
Hardener 1 part by volume 008 7501

### Pot life (+23°C)

1½ hours

### Recommended film thicknesses and theoretical coverage

Recommended film thicknesses		Theoretical coverage
wet	dry	
125µm	100µm	8.0 m²/l
250µm	200µm	4.0 m²/l

Practical coverage depends on the application method, painting conditions and the shape and roughness of the surface to be coated.

### Drying time

DFT 150µm	+10°C	+23°C	+35°C
Dust dry, after	6 h	3 h	1½ h
Touch dry, after	14 h	5½ h	3½ h
Recoatable with polyurethane and epoxy, after	30 h	8 h	5 h
Recoatable without sanding, after max.	2 months	1 month	7 d

Drying and recoating times are related to the film thickness, temperature, the relative humidity of the air and ventilation.

### Gloss

Gloss.



## Temabond ST 300

### Color shades

RAL, NCS, SSG, BS, MONICOLOR NOVA and SYMPHONY colour cards. Temaspeed  
Premium tinting

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## APPLICATION INSTRUCTIONS

<b>Surface preparation</b>	<p>Oil, grease, salts and dirt are removed by appropriate means. (ISO 12944-4)</p> <p>Steel surfaces: Remove rust by tool cleaning to minimum St2 or blast clean to Sa2 or Sa2½. Blast clean to grade Sa2½ for immersion. (ISO 8501-1)</p> <p>Earlier painted surfaces: Roughen old paint surfaces using e.g. abrasive wheel, sand paper or blast cleaning.</p> <p>Concrete surfaces: The surface must be dry and at least 4 weeks old. The relative humidity of the concrete should not exceed 97%. Remove any splashes and unevennesses by grinding. Remove laitance and form oil from concrete castings by sanding or blast cleaning. Any cracks, crevices and voids must be repaired with a mixture of Temafloor 200 and fine dry quartz sand.</p>
<b>Recommended primers</b>	Temabond ST 200, Temabond ST 300, Temazinc 77, Temazinc 99, Temacoat SPA Primer, Temacoat Primer.
<b>Recommended topcoats</b>	Temacoat GPL, Temacoat GPL-S MIO, Temacoat GPL-S Primer, Temacoat GS 50, Temacoat RM 40, Temabond ST 300, Temacryl EA 50, Temadur 10, Temadur 20, Temadur 50, Temadur 90, Temadur HB 50, Temadur HB 80, Temathane 50, Temathane 90, Temathane PC 50, Temathane PC 80, Temacoat SPA 50, Temacoat Primer.
<b>Application conditions</b>	<p>All surfaces must be clean, dry and free from contamination. The temperature of the ambient air, surface and paint should not fall below +10°C during application and drying. Relative humidity of the air should not exceed 80% during application and drying. The surface temperature of steel should remain at least 3°C above the dew point. Good ventilation and sufficient air movement is required in confined areas during application and drying.</p> <p>Note! There is a natural tendency of this coating to chalk, discolor or yellow unevenly. It is recommended to use polyurethane topcoat when there are high aesthetical requirements on color appearance.</p>
<b>Mixing components</b>	First stir base and hardener separately. The correct proportions of base and hardener must be mixed thoroughly before use. Use power mixer for mixing. Insufficient mixing or incorrect mixing ratio will result in uneven drying of the surface and weaken the properties of the coating.
<b>Application</b>	<p>For airless spraying, the product is thinned approximately 0–10%. Recommended nozzle tip is 0.013"–0.019" and pressure 120–180 bar. Spray angle shall be chosen according to the shape of the object.</p> <p>For brush application product should be thinned according to the circumstances.</p>
<b>Thinners</b>	Thinner 1031
<b>Cleaning of equipment</b>	Thinner 1031.
<b>VOC</b>	<p>The Volatile Organic Compounds amount is 195 g/litre of paint mixture.</p> <p>VOC content of the paint mixture (thinned 10% by volume) is 260 g/l.</p>
<b>HEALTH AND SAFETY</b>	<p>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.</p> <p>A health and safety data sheet is available on request from Tikkurila Oyj.</p>

**For industrial and professional use only.**



## Temabond ST 300

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 Heidehofintie 2 FI-01300 VANTAA	
16	
0809-CPD-0773	
TIK-0162-5001	
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 I: $\geq 4 \text{ Nm}$
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	F(NPD)
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