

## Temafloor AC509

**DESCRIPTION** 

A two-component, solvent-free, low viscosity acrylic binder.

PRODUCT FEATURES AND RECOMMENDED USES

- Used as a binder for Temafloor AC acrylic troweling screed
- Suitable to be used as a self-levelling coating and as a binder of a coloured sand screed
- Suitable for outdoor use with low or medium mechanical stress
  Suitable to be used for cold storages in temperatures 0--+10°C
- · Cures fast also in low temperatures
- · Recommended especially for the floors in food industry

#### **TECHNICAL DATA**

Volume solids approx. 100%

**Specific gravity** 0.96 kg /l (ready made mixture)

Mixing ratio

Temperature (°C)*	The amount of hardener (percentage of weight of the binder)	Pot life (min)	Drying time (min)
+5	4	Approx. 35	Approx. 65
+10	4	Approx. 35	Approx. 65
+15	2,5	Approx. 30	Approx. 65
+20	1	Approx. 30	Approx. 45
+25	1	Approx. 20	Approx. 35

<sup>\*</sup> Temperature of the binder, air and the floor.

Grinding screeds 4-6 mm:

Temafloor AC509 19 w-% Coloured sand Ø 0,3–0,8 mm 20 w-% Coloured sand Ø 0,6–1,2 mm 61 w-%

**Possible hardeners** BP-50-FT, Perkadox®CH-50 or PEROXAN BP-Pulver 50 W.

**Practical coverage** For a flat substrate:

2 mm layer: 2 litres ready to use screed / m<sup>2</sup> 5 mm layer: 5 litres ready to use screed / m<sup>2</sup>

Practical coverage depends on the evenness of the substrate.

Cleaning of equipment Thinner 006 1400.

Finish Semi-matt.

**Colors** The colour of the screed is determined by the sand used.

**Thinning instructions** Do not thin.

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

Temafloor AC509: max. VOC < 500 g/l.

Can sizes 20,0 L, 200,0 L, 1000 KG



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#### **APPLICATION INSTRUCTIONS**

**Surface preparation** 

New concrete: Remove laitance by power grinding, vacuum grit blasting or hydrochloric acid etching. Choose the method best suited for the premises. After grinding remove dust carefully with a vacuum cleaner. Hydrochloric acid etching is carried out with diluted hydrochloric acid (1 part concentrated hydrochloric acid, 4 parts water). Rinse with plenty of water. Dry the floor.

Old concrete: Remove all grease, oil, chemicals and other impurities by Maalipesu detergent. Remove old peeling paint layer by grinding, milling or vacuum grit blasting. Choose the method best suited for the premises. Clean out pot-holes removing all loose friable material. Open cracks with e.g. an abrasive tool. Remove loose material and dust.

**Application conditions** 

The relative humidity of the concrete should not exceed 97%. The temperature of the ambient air, surface or coating should not fall below +5°C during application or drying. Relative humidity of air should not exceed 80%.

Mixing components

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.

**Priming** 

Prime using Temafloor AC102 Primer. Pour the primer mixture onto the floor and apply by the trowel or roller 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. Subsequent treatment can be carried out after 30 min.

Scatter sand of grain size  $\emptyset$  0,4–0,8 mm on the fresh primer coat to ensure the screed adhesion and prohibit gliding of the screed.

**Patching** 

Patch pot-holes and cracks with a mixture of unthinned Temafloor AC509 and dry, clean sand. Mixing ratio e.g. 1 part by volume of varnish mixture and 1–2 parts by volume of sand of grain size 0.1–0.6 mm. Sand the patched areas before overcoating, if necessary.

The floor can be levelled by using Temafloor AC509 and sand of grain size 0,1–0,3 mm.

Note! Concrete surface should always be primed before patching.

**Screed** 

Pour the Temafloor AC509 mixture onto the floor. Apply by an adjustable trowel to the desired thickness. Trowel the screeded surface by hands or use broadcasting technique.

Note! Add the remaining mixture to the next batch of the product, do not scrape it out of the container onto the floor.

**Topcoating** 

Topcoating can be carried out after the screed has cured. Topcoating can be carried out with Temafloor AC609 Clear or Temafloor AC610 Clear topcoat. Pour the varnish mixture onto the floor, apply with a rubber trowel and level with a roller.

**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 professional use only.



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## **Temafloor AC509**

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.



# **Temafloor AC509**

EN 1504-2:2004

The European harmonized productstandard 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-1600-5004			
EN 1504-2:2004			
Product for protection and repair of concrete structures – Coating.			
Permeability to CO2	sp > 50 m		
Impact resistance	Class I: ≥ 4 Nm		
Capillary absorption and permeability to water	$w < 0.1 \text{ kg/m}^2 \cdot h^{0.5}$		
Abrasion resistance	< 3000 mg		
Reaction to fire	E <sub>ff</sub> -s1 (NPD)		
Adhesion strength by pull off test	≥ 2,0 N/mm²		
Release of dangerous substances	NPD		
Permeability to water vapour	Class III, s <sub>D</sub> > 50 m		
Resistance to severe chemical attack  Tested as part of a system together with Ter	Class I		

Tested as part of a system together with Temafloor AC 102 Primer and Temafloor AC 609 Clear.