Fontefloor EP Clear

DESCRIPTION
A two-component water-borne epoxy lacquer.

PRODUCT FEATURES AND RECOMMENDED USES
- For lacquering of new, old and earlier painted concrete surfaces
- To be used on top of Fontefloor EP 100 and other Temafloor coatings
- Also suitable for dust binding and lacquering of concrete walls
- The M1 classification for low-emitting building materials has been granted by the Finnish Building Information Foundation RTS
- Recommended for lacquering of floors exposed to moderate chemical and mechanical stress in industrial facilities, warehouses, repair shops etc

TECHNICAL DATA

Volume solids
approx. 23%

Specific gravity
1.1 kg / litre (mixed).

Mixing ratio
Base 3 parts by volume  Fontefloor EP Clear
Hardener 1 part by volume  008 4571

Pot life (+23°C)
Approx. 1h after mixing.

Practical coverage
Coverage on concrete floors is on the average:
Priming 5–8 m²/l
Finishing 6–10 m²/l
Practical coverage depends on the porosity and evenness of the substrate and on the application method.

Drying time (+23°C)
Dust dry after 6 hours
Recoatable after 16 hours
Fully cured after 7 days

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

Thinners
Water

Cleaning of equipment
Water. Equipment should be cleaned immediately after use before the lacquer has dried.

Finish
Full gloss.

Colors
Clear

VOC
VOC 2004/42/EC (cat A/j) 140 g/l (2010)
Fontefloor EP Clear: max. VOC < 140 g/l

Can sizes
10,0 L
Fontefloor EP Clear
APPLICATION INSTRUCTIONS

Surface preparation
New concrete: Remove laitance by power grinding 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. 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 +15°C during application or drying. Relative humidity of air should not exceed 80%.

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.

Mixing components
First stir base and hardener separately. Mix the correct proportions of base and hardener thoroughly (approx. 3 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 20–30% thinned Fontefloor EP Clear lacquer. Always add the water needed to a ready mixture and stir thoroughly. Pour the mixture onto the floor, apply with a rubber trowel and level with a roller.

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.

Patching
Patch pot-holes and cracks with a mixture of unthinned Fontefloor EP Clear 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.

Note! Concrete surface should always be primed before patching.

Topcoating
Overcoating should be done within 16–48 hrs after priming. If the primed surface is not overcoated within 48 hrs, it should be abraded. Thin Fontefloor EP Clear 20–30% with water. Pour the mixture onto the floor and apply it with a trowel and level with a roller. Apply as thin layer as possible.

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

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.
Fontefloor EP Clear

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.
Fontefloor EP Clear

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 and 1f in the appendix ZA.

<table>
<thead>
<tr>
<th>Property</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permeability to CO2</td>
<td>$s_D &gt; 50$ m</td>
</tr>
<tr>
<td>Impact resistance</td>
<td>Class I: $\geq 4$ Nm</td>
</tr>
<tr>
<td>Capillary absorption and permeability to water</td>
<td>$w &lt; 0.1$ kg/m² $\cdot$ h⁰.⁵</td>
</tr>
<tr>
<td>Abrasion resistance</td>
<td>$&lt; 3000$ mg</td>
</tr>
<tr>
<td>Reaction to fire</td>
<td>$B_{fi} \cdot s1$</td>
</tr>
<tr>
<td>Adhesion strength by pull off test</td>
<td>$\geq 2.0$ N/mm²</td>
</tr>
<tr>
<td>Release of dangerous substances</td>
<td>NPD</td>
</tr>
<tr>
<td>Permeability to water vapour</td>
<td>Class I, $s_D &lt; 5$ m</td>
</tr>
<tr>
<td>Resistance to severe chemical attack</td>
<td>Class II</td>
</tr>
</tbody>
</table>