Fontedur FL Matt

DESCRIPTION
A two-component, water-borne polyurethane lacquer.

PRODUCT FEATURES AND RECOMMENDED USES
- The M1 classification for low-emitting building materials has been granted by the Finnish Building Information Foundation RTS
- Can be tinted into Semi-transparent Grey colors in Pro Grey color card
- Suitable to be used as a top lacquer for Fontefloor and Temafloor epoxy and polyurethane floors
- Can also be used for dust binding, does not darken concrete surface

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Volume solids</th>
<th>40±2 %</th>
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<tbody>
<tr>
<td>Specific gravity</td>
<td>1.1 kg / l</td>
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<tr>
<td>Mixing ratio</td>
<td>Base: 10 parts by volume, Fontedur FL Matt</td>
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<tr>
<td></td>
<td>Hardener: 1 part by volume, Fontedur FL Matt Hardener</td>
</tr>
<tr>
<td>Pot life (+23°C)</td>
<td>2 hours</td>
</tr>
<tr>
<td>Practical coverage</td>
<td>Untreated concrete: 7–12 m²/l</td>
</tr>
<tr>
<td></td>
<td>Top lacquering: 10–20 m²/l</td>
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<tr>
<td></td>
<td>Practical coverage depends on the porosity and evenness of the substrate.</td>
</tr>
</tbody>
</table>

Drying time (+23°C)
- Dust dry after 30 min
- Recoatable after 4 hours
- Light trucking after 24 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

Finish
Matt.

Colors
Colorless. Can be tinted into Semi-transparent Grey colors in Pro Grey color card (TVT 5140–5154) with Avatint tinting system

Reaction to fire
B₁F₂-s1 according to standard EN 13501-1.

VOC
VOC 2004/42/EC (cat A/j) 140 g/l (2010)
Fontedur FL Matt: max. VOC < 140 g/l

Can sizes
3.0 L, 10.0 L
Fontedur FL Matt

APPLICATION INSTRUCTIONS

Surface preparation
Remove dust and loose particles from the floor. Remove all grease, oil and other impurities by detergent washing.

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 +10ºC 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. 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.

Topcoating
When used for coating of concrete surfaces, prime using Fontedur FL Matt thinned with 10–20% water. Pour the lacquer mixture onto the floor and spread it with a trowel. The second treatment can be carried out 2 hours after priming if necessary.

When used for topcoating of Temafloor or Fontefloor epoxy or polyurethane floorings, Fontedur FL Matt should be thinned with 10–20% water. Pour the lacquer mixture onto the floor and spread it with a trowel or roller. Apply as thin layers as possible. If the substrate to be coated with Fontedur FL Matt has not been overcoated within 24hrs from application, it should be abraded.

When used as a tinted lacquer on concrete, the color and quality of the substrate have an impact on final color shade and appearance. Characteristic appearance and roughness of concrete surface can be accentuated by applying tinted Fontedur FL Matt. Application method also influences the final appearance since application marks will be visible. Roller application is not recommended for tinted lacquer. Apply by trowel in as thin layers as possible. The color shade will be more transparent if the floor is first treated with untinted lacquer.

It is recommended to treat the floor with 0,5 % Kiilto Caretop before taking it into use.

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.

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.
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.

### Properties of Fontedur FL Matt

<table>
<thead>
<tr>
<th>Property</th>
<th>Requirement</th>
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<tbody>
<tr>
<td>Permeability to CO2</td>
<td>( S_D &gt; 50 \text{ m} )</td>
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<tr>
<td>Impact resistance</td>
<td>Class I: ( \geq 4 \text{ Nm} )</td>
</tr>
<tr>
<td>Capillary absorption and permeability to water</td>
<td>( w &lt; 0.1 \text{ kg/m}^2 \cdot \text{h}^{0.5} )</td>
</tr>
<tr>
<td>Abrasion resistance</td>
<td>(&lt; 3000 \text{ mg} )</td>
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<tr>
<td>Reaction to fire</td>
<td>B&lt;sub&gt;F&lt;/sub&gt;S1</td>
</tr>
<tr>
<td>Adhesion strength by pull off test</td>
<td>( \geq 2.0 \text{ N/mm}^2 )</td>
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<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 \text{ m} )</td>
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