Terasit Lotus
Wet impregnating agent on fluorocarbon resin basis

PROPERTIES:
• aqueous protective fabric finishing agent
• water, oil and soil repellent finish
• finished fabrics stay permeable to the air
• soft, supple feel
• low condensation temperature
• brilliance of colour will be kept
• free of PFOA (perfluorooctanoic acid) and PFOS (perfluorooctanesulphonate)
• reduced amount of fluorinated compounds due to high-branched polymers

APPLICATION:
For garments Terasit Lotus is applied in a dip-tumble-process in the last rinsing bath of washing extractors. Add the product after reaching the water level and after the drum starts to move.

_Dip-Tumble-Process_
The finish with Terasit Lotus is applied in a single bath. The washed textiles must be free from residues of detergent and alkalis by careful rinsing before they are impregnated so that the water-repellent effect is not impaired. The finishing bath should have a pH value of 5 - 6. Concerning this, a dosing of acetic acid or formic acid might be necessary. The calculated amount of Terasit Lotus is added to the finish bath (liquor ratio 1:3 - 1:4). The textiles are treated in the impregnating liquor for 10 minutes at 30 - 40 °C (86 - 104 °F) then centrifuged briefly. In the case of membrane textile an interval extraction is highly recommended.

_Recommended dosage_
<table>
<thead>
<tr>
<th>Liquor ratio</th>
<th>Time [min]</th>
<th>Temp. (°C)</th>
<th>ml/l</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:3 – 1:4</td>
<td>3</td>
<td></td>
<td></td>
<td>Acidify to pH 5-6</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>30-40</td>
<td>25</td>
<td>Terasit Lotus</td>
</tr>
</tbody>
</table>

For industrial use only. This information sheet is for guidance only. The data set out here are based on the current status of our knowledge and experience. They do not in any way absolve users of the need to carry out their own checks and tests for suitability of the products for the intended processes and purposes. The data in this information sheet do not represent assurance of properties and stability of the products we are to supply. Subject to technical modifications within reason. The current version of the EU Material Safety Data Sheet must also be observed.
The dosing should be adjusted to the kind of fabric as well as to the desired effect. A treatment time of 15 minutes is recommended to achieve maximum effects. Drying should be carried out under full heat capacity. Fully development of the effect is achieved at a drying temperature of 80 °C/176 °F (drum exit) for at least 7 minutes (Please obey the care label!). For large scale apparel a spray coat method is also suitable.

**Spray Method**

*Application in the machine*

Modern, professional washing machines can be equipped with a spray facility for finishing agents like dry-cleaning machines. In this case it is possible to spray Terasit Lotus on to the washed, spin-damp textiles advantageously as far as costs are concerned and without adding any chemical load to the waste water. Terasit Lotus should be applied at a rate of 40 ml/kg (0.6 fl oz/lb); dilution ratio with water 1:4. After spraying the textiles should be tumbled for further 3 - 5 minutes. Spraying outside the machine is not allowed!

**Drying**

Depending on the temperature capacity of the textiles they are dried in a tumbler or they are hanging up to dry at room temperature (f.i. leather articles). A remarkable effect is reached with drying at low temperatures of 30 °C/86 °F. To reach a complete impregnating effect higher temperatures are necessary.

**Quality Standards (dependent on material and process)**

With the above mentioned methods the following requirements are fulfilled:

- DIN EN 24920 Textiles; determination of resistance to surface wetting (spray test)
- DIN EN ISO 14419 Textiles - Oil repellence, hydrocarbon resistance test
- DIN EN 469 Performance requirements for protective clothing for fire fighting
- EN ISO 15025 Influence of impregnation on the flame propagation
- DIN EN ISO 20811 Influence of impregnation on the flow resistance of water

### TECHNICAL DATA:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density 20 °C (68 °F)</td>
<td>1.00 g/ml</td>
</tr>
<tr>
<td>pH-value (1 %)</td>
<td>3.0 - 4.0</td>
</tr>
</tbody>
</table>

### HINTS:

**Storage**

The product should be stored protected against freezing though the solidified product is fit for use again after thawing without any loss of quality. The product can be stored for at least 12 months in its original sealed packing.