DEUREX® TO 83

TECHNICAL INFORMATION

Chemical description:  Oxidized Fischer-Tropsch wax

Benefits:  
- Hard and scratch-resistant wax with a hydrophilic character

Applications:  
- Production of water-based emulsions and dispersions for:
  - Textile industry (improved sewability and cutting of textiles)
  - Care products (hydophobing, gloss, hardness)
  - Water-based coatings (slip, abrasion and scratch resistance)
  - Water-based printing inks (slip, abrasion and scratch resistance)
  - Paper industry (hydophobing, tensile strength, stability)
  - Polishes (surface improvement)
  - Leather (surface improvement, hydophobing)
  - Anti-corrosive agent

- PVC processing
  - Increase viscosity
  - Faster gelling
  - Improved compatibility
  - Perfect external lubricant and internal lubricant in one
  - No metal adhesion
  - Mould release agent

- Hot melts
  - Shortening the open time, increased adhesion, no stringing
  - Reduced amount of bonding agents

- Masterbatch
  - Dispersing agent for hydrophilic pigments, cold applications

Technical data:

<table>
<thead>
<tr>
<th>Property</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Off-white</td>
<td>Broken coarse granules</td>
<td></td>
</tr>
<tr>
<td>Delivery form</td>
<td>DEUREX TO 83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Congealing point*</td>
<td>93 °C</td>
<td>98 °C</td>
<td>LV 12 (DGF M-III 3)</td>
</tr>
<tr>
<td>Acid value*</td>
<td>25 mgKOH/g</td>
<td>30 mgKOH/g</td>
<td>DIN EN ISO 2114</td>
</tr>
<tr>
<td>Saponification value</td>
<td>50 mgKOH/g</td>
<td>80 mgKOH/g</td>
<td>DIN EN ISO 2114</td>
</tr>
<tr>
<td>Viscosity (140 °C):</td>
<td>20 mPas</td>
<td>LV 2</td>
<td>(DIN EN ISO3104)</td>
</tr>
<tr>
<td>Penetration</td>
<td>3.0 mm*10⁻¹</td>
<td>LV 4</td>
<td>(DIN 51579)</td>
</tr>
<tr>
<td>Density (23 °C):</td>
<td>0.94 g/cm³</td>
<td>0.95 g/cm³</td>
<td>LV 3</td>
</tr>
</tbody>
</table>

* Part of certificate of analysis

Alternative delivery forms:

DEUREX® TO 8120 M – Micro-sized powder, 98% < 20 µm

Alternative product:

DEUREX® TO 80 – Oxidized Fischer-Tropsch-wax with acid value 2 – 4
DEUREX® TO 81 – Oxidized Fischer-Tropsch-wax with acid value 5 – 10
DEUREX® TO 82 – Oxidized Fischer-Tropsch-wax with acid value 15 – 20
DEUREX® TO 84 – Oxidized Fischer-Tropsch-wax with acid value 30 – 40