**DEUREX® TO 81**

**TECHNICAL INFORMATION**

**Chemical description:** Oxidized Fischer-Tropsch wax

**Benefits:**
- Extremely 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 (hydrophobing, gloss, hardness)
  - Water-based coatings (slip, abrasion and scratch resistance)
  - Water-based printing inks (slip, abrasion and scratch resistance)
  - Paper industry (hydrophobing, tensile strength, stability)
  - Polishes (surface improvement)
  - Leather (surface improvement, hydrophobing)
  - 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

**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></td>
<td></td>
</tr>
<tr>
<td>Delivery form</td>
<td>DEUREX TO 81 = Broken coarse granules</td>
<td>DEUREX TO 81 G = Granules</td>
<td></td>
</tr>
<tr>
<td>Congealing point*</td>
<td>95 °C</td>
<td>102 °C</td>
<td>LV 12 (DGF M-III 3)</td>
</tr>
<tr>
<td>Acid value*</td>
<td>5 mgKOH/g</td>
<td>10 mgKOH/g</td>
<td>DIN EN ISO 2114</td>
</tr>
<tr>
<td>Saponification value</td>
<td>10 mgKOH/g</td>
<td>20 mgKOH/g</td>
<td>DIN EN ISO 2114</td>
</tr>
<tr>
<td>Viscosity (140 °C)</td>
<td>20 mPas</td>
<td></td>
<td>LV 2 (DIN EN ISO 3104)</td>
</tr>
<tr>
<td>Penetration</td>
<td>1.0 mm*10^-1</td>
<td></td>
<td>LV 4 (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 (DIN EN ISO 1183)</td>
</tr>
</tbody>
</table>

* Part of certificate of analysis

**Alternative delivery forms:**
- DEUREX® TO 8120 M – Micro-sized powder, 98% < 20 µm
- DEUREX® TO 80 – Oxidized Fischer-Tropsch-wax with acid value 2 – 4
- DEUREX® TO 82 – Oxidized Fischer-Tropsch-wax with acid value 15 – 20
- DEUREX® TO 83 – Oxidized Fischer-Tropsch-wax with acid value 25 – 30
- DEUREX® TO 84 – Oxidized Fischer-Tropsch-wax with acid value 30 – 40