VISCOWAX® 252 – high quality oxidised, polar polyethylene wax.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Reference Value</th>
<th>Units</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acid Value*</td>
<td>14-18</td>
<td>mg KOH/g</td>
<td>DGF M-IV 2</td>
</tr>
<tr>
<td>Viscosity @ 140°C *</td>
<td>150-300</td>
<td>mm²/s</td>
<td>DGF M-III 8</td>
</tr>
<tr>
<td>Drop Point *</td>
<td>102-108</td>
<td>°C</td>
<td>DGF M-III 3</td>
</tr>
<tr>
<td>Solidification Point</td>
<td>94-98</td>
<td>°C</td>
<td>DGF M-III 4a</td>
</tr>
<tr>
<td>Needle Penetration</td>
<td>≤ 3</td>
<td>10⁻¹ mm</td>
<td>DGF M-III 9b</td>
</tr>
<tr>
<td>Density</td>
<td>0.94-0.96</td>
<td>g/cm³</td>
<td>DIN EN ISO 1183, C</td>
</tr>
<tr>
<td>Molecular weight (Mn)</td>
<td>1700</td>
<td>g/mol</td>
<td>GPC</td>
</tr>
<tr>
<td>Saponification value</td>
<td>&gt; 30</td>
<td>mg KOH/g</td>
<td>DGF M-IV 2</td>
</tr>
<tr>
<td>Type of delivery</td>
<td>Fine grain</td>
<td>-</td>
<td>Visual</td>
</tr>
<tr>
<td>Appearance</td>
<td>White-yellowish</td>
<td>-</td>
<td>Visual</td>
</tr>
</tbody>
</table>

* general supply specification  
DGF: Test methods of the Deutsche Gesellschaft für Fettwissenschaft e.V. Münster i.W.

**Main Scope of Application**

- **Plastic processing**
  - Lubricant for PVC-processing

- **Paraffin compounding, candle industry**
  - Increase on drop point
  - Improvement of release effect and surface gloss

Applications as water-based Emulsions:

- **Textile industry**
  - Plasticizer component
  - Improvement of cross-linking properties, tear resistance and smoothing of fabrics
  - Slip agent for sewing threads

- **Paper industry**
  - For surface finishing

- **Printing inks**
  - As anti-blocking / slip agent
  - Agent for abrasion prevention in aqueous printing inks

- **Die-casting industry**
  - As release agent

- **Fruit coating**
**Status under Food Legislation**

**EU:**
Listed in Annex I of Regulation (EU) 10/2011 (Ref. No: 80077, SML = 60 mg/kg)

**USA:**
FDA CFR 21 §177.1620 Polyethylene, oxidized;

Further §§175.300, 175.105, 176.170, 176.180, 177.1390; 177.1200; 177.2800

For fruit coating application VISCOWAX® 252 complies with
- EU-Directive 95/2/EG (E914)
- Germany: Deutsche Zusatzstoffzulassungsverordnung: (E914)
- USA: FDA CFR 21 § 172.260

**Form of Delivery, Packaging and Storage**

VISCOWAX® 252 is shipped palletised (preferably 750 kg each) and shrink-wrapped as dust-free powder in PE sacks of 25 kg each. Shipment in big bags of different sizes is possible upon request. The product shall be stored in its original packaging at room temperature in a dry place. It must not be stored together with amines. Avoid direct sun radiation and water contact.

**Safety and Environment**

VISCOWAX® 252 has not been classified as hazardous materials in accordance with the Regulation (EC) No. 1272/2008 (CLP/GHS) and therefore it does not require marking. The product does not contain heavy metals. It is insoluble in water and has no harmful effect on fish and bacteria. Disposal of the product is to be carried out in accordance with the local regulations. Please refer to the Safety Material Data Sheet for further safety-relevant information.

Please do not hesitate to contact us for further details.

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The general points listed correspond to our current knowledge and have been elaborated to the best of our belief and under consideration of professional care. Herewith, we do not guarantee definite properties nor suitability for a particular application. It is the customer's duty to particularly check suitability of the product for the use intended.