## STABAXOL® 1 LF

### Function
Antihydrolysis agent with distinctly reduced content of volatile components for Polyester polymers (PET, PBT, TPE), Polyamide, thermoplastics Polyesterpolyurethanes (TPU) and millable Urethane rubber. Very suitable for extrusion of monofilaments.

### Product description

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Chemical composition:</td>
<td>Monomer carbodiimide</td>
</tr>
<tr>
<td>Physical form:</td>
<td>slightly yellowish, crystallized melt</td>
</tr>
<tr>
<td>Density (20 °C):</td>
<td>approx. 0.97 g/cm³</td>
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<tr>
<td>Density (50 °C):</td>
<td>approx. 0.95 g/cm³</td>
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<tr>
<td>Melting Range:</td>
<td>40 - 45 °C</td>
</tr>
<tr>
<td>Viscosity (50 °C):</td>
<td>16.0 - 24.0 mPa.s</td>
</tr>
<tr>
<td>Solubility:</td>
<td>soluble in organic solvents, e.g. aceton, dichloromethane; insoluble in water</td>
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<tr>
<td>Carbodiimide content:</td>
<td>min. 10.0 %</td>
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</tbody>
</table>

### Product information
Stabaxol 1 LF is an active antihydrolysis agent for Polyester polymers. In comparison to Stabaxol 1 volatile components are strongly reduced. Therefore it is very suitable for the production of monofilaments.

Dosing
Dosing depends on acid end group and humidity contents of the polymer to protect and expected protective action. For Polyester, Polyamide, and thermoplastic Polyurethanes we recommend 1.5 to 2.5 pbw. Prior tests should always be carried out to determine the most suitable addition, however. For addition of 2.5 pbw of Stabaxol 1 LF increases the lifespan of PET about four times.
Equipment
Usually Stabaxol 1 LF may be fed separately. It can be incorporated with all units of machinery suitable for processing Polyester or Polyamide which allow for a proper additive dispersion. It is advisable to extrude with a twin screw extruder providing an L/D ratio of > 38. Please note that an extruder's feeding zone has been kept cold in order to prevent material built up in the feeding zone.

Elongation at break after Hydrolysis
PET monofilaments in saturated vapour at 120°C

Tensile Strength after Hydrolysis
PET monofilaments in saturated vapour at 120°C
### Packing
- Metal cans, contents 10 kg
- Metal cans, contents 50 kg
- Metal drums, contents 180 kg

### Storage stability
Stabaxol 1 LF can be kept for 1 year under cool, dry conditions

### Handling
Consult material safety data sheet (MSDS) for additional handling information on Stabaxol 1 LF.

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