STABAXOL® P 100
Plastic Additives / Hydrolysis Stabilizer

Function
Stabaxol® P 100 is an antihydrolysis agent for PET, PBT, PA und TPE.

Product description

<table>
<thead>
<tr>
<th>Chemical composition:</th>
<th>Aromatic polycarbodiimide</th>
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<tr>
<td>Physical form:</td>
<td>- amber coloured pastilles</td>
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<td>- yellowish powder</td>
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<tr>
<td>Density:</td>
<td>approx. 1.05 g/cm³ (20 °C / 68 °F)</td>
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<td>Melting range:</td>
<td>approx. 100 - 120 °C (212 - 248 °F)</td>
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<td>Carbodiimide content:</td>
<td>&gt; 13.0 %</td>
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<td>(N=C=N)</td>
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The analytical data are general guide values.

Product information
The main application of Stabaxol® P 100 is hydrolysis protection of PET, PBT, PA and TPE. The addition of merely 2.0 weight-% Stabaxol® P 100 to PET increases the life time of the latter by 3 - 4 times.

Depending on the number of acid end groups and the humidity content of the polymer to be stabilized, as well as the stabilizing effect to be obtained, it is recommended to use 1.0 - 2.5 weight-% Stabaxol® P 100. The most suitable dosage depends on the requirements to be met and should always be ascertained in preliminary trials. Stabaxol® P 100 is preferably metered separately to the infeeding zone of the extruder.
Stabaxol® P 100 can be processed on any unit suitable for polyester and polyamide processing which provides sufficient dispersion of the material in the polymer. In respect of the extruder equipment, experience shows that it is advisable to use a twin-screw extruder equipped with a L/D ratio > 38. Appropriate cooling of the feeding zone is recommended to avoid particle accumulation in the feeding area. At processing temperature traces of volatile matters can escape, which may temporarily cause irritation of skin, eyes and respiratory passages.

It is highly recommended to provide adequate local ventilation at all places where Stabaxol® P 100 stabilized products are exposed to temperatures exceeding 200 °C (392 °F). In particular, it is necessary to avoid direct contact with volatile emissions.

For easy dosing and homogenizing, Stabaxol® P 100 is available as masterbatch based on the corresponding polymers.

**Packaging**

20 kg fibre drums/540 kg per pallet (approx. 44 lb/1188 lb per pallet)

**Storage stability**

According to experience available, if stored at about 20 °C (68 °F) in originally closed containers, Stabaxol® P 100 can be kept for 24 months without becoming less effective. Store in cool and dry place.

During transportation or in case of prolonged storage at slightly elevated temperatures, one might observe agglomeration of the particles. Please make sure that such agglomerations are being broken prior to use.

**Handling & safety**

Relevant safety data and references as well as possibly necessary warning labels are to be found in safety data sheet.

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