ecoflex® Batch AB 1

Masterbatches with antiblocking agent for ecoflex® and ecovio® – The biodegradable polymers for compostable film

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Product description

ecoflex® F Blend C1200 is our biodegradable, statistical, aliphatic-aromatic copolyester based on the monomers 1,4-butanediol, adipic acid and terephthalic acid for film extrusion. Our ecovio® F Film and ecovio® F Blend products are basically compounds of ecoflex® F Blend and polylactic acid (PLA) produced with various contents of renewable resources. Detailed information on ecoflex® and ecovio® are available in our product brochure and our technical product data sheets.

ecoflex® Batches are based on ecoflex®, because the regulations for biodegradable plastics limit the use of a non-biodegradable polymer within biodegradable plastics to max. 1%. In order to obtain a certificate for articles made of ecoflex® F Blend C1200 we have to meet the requirements of the DIN EN 13432, ASTM D 6400 or the Japanese GreenPla standard. Masterbatches based on biodegradable plastics will enable you to qualify your application for the certificate according to these specific standards.
Antiblocking agents are used to reduce the surface friction during film extrusion of ecoflex® F Blend C1200 and ecovio® F Film in subsequent processes as printing or bag making. In any application we need to add a slip agent e. g. ecoflex® Batch SL 1.

Antiblocking agents are characterized by the type and the top cut of the minerals in use:

<table>
<thead>
<tr>
<th>Batch</th>
<th>Mineral</th>
<th>Content</th>
<th>Top Cut</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ecoflex® Batch AB 1</td>
<td>Chalk</td>
<td>60%</td>
<td>98% &lt; 12µm</td>
<td>1 - 10%</td>
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</tbody>
</table>

The choice and dosage of the antiblocking agents depends on the requirements of the film.

ecoflex® Batch AB 1 is our standard antiblocking agent. We recommend to use 4% of AB 1 for a standard film quality.

ecoflex® F Blend and ecovio® F Film exhibits an excellent compatibility to other biodegradable polymers e. g. in dry blends with polylactic acid, biodegradable aliphatic polyesters or starch compounds. The processing of ecoflex® F Blend and ecovio® F Film on extrusion lines depends on the formulation, the extrusion technology and processing conditions (e.g. predrying). The additive system needs to be adapted to the composition of the blend and the requirements of the application. Therefore trials are always recommended to assess the quality of the final product.

Examples for different film formulations can be obtained from our ecoflex®, ecovio® brochure.

**Form supplied and storage**

ecoflex® antiblocking agents are supplied as pellets in 25 kg bags. Temperatures during transportation and storage may not exceed 70°C at any time.

**Quality Control**

ecoflex® masterbatches are produced on state of the art compounding machines according to DIN EN ISO 9001:2000. The additive and the moisture content have been defined as specified parameters for quality control of ecoflex® antiblocking agents. A certificate can be provided with each lot number upon request. Other data given in our literature are typical values, which are not part of our product specification for ecoflex® antiblocking agents.

**Applications**

ecoflex® F Blend C1200 and our ecovio® F Film products have been developed for the conversion to flexible films using a blown film or cast film process. Typical applications are packaging films, agricultural films and compost bags. In view of numerous factors influencing functionality and shelf life of ecoflex® or ecovio® films and finished articles made thereof these parameters have to be tested by the converters before utilisation.

We supply technical service information concerning the blown or cast film process with ecoflex®, ecovio® and ecoflex® masterbatches on demand.
The information submitted in this document is based on our current knowledge and experience. In view of the many factors that may affect processing and application, these data do not relieve processors of the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance for a special purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.