WE MAKE BIOPLAST

BIOPLAST

105

- 67% biobased
- Injection moulding
- Fit for food packaging
BIOPLAST 105 is a plasticizer-free, thermoplastic and transparent material that contains a high portion of biologically sourced raw materials. The biobased carbon share of the entire formulation achieves 67%. BIOPLAST 105 is easy-flowing and therefore particularly suitable for processing by injection moulding to produce items that are completely biodegradable. The material can also be converted by sheet and blown film extrusion. The absence of plasticizer allows the material to be easily processed to manufacture stable products of consistent quality. BIOPLAST 105 has an excellent shelf life but will biodegrade readily in an industrial composting environment.

**PROPERTIES**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Target value</th>
<th>Unit</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pellet size</td>
<td>3.0</td>
<td>mm</td>
<td>Caliper gauge</td>
</tr>
<tr>
<td>Density</td>
<td>1.24</td>
<td>g/cm³</td>
<td>EN ISO 1183-1/A</td>
</tr>
<tr>
<td>Bulk density</td>
<td>830</td>
<td>kg/m³</td>
<td>EN ISO 60</td>
</tr>
<tr>
<td>MFR (190°C, 2.16 kg)</td>
<td>4.1</td>
<td>g/10 min</td>
<td>EN ISO 1133</td>
</tr>
<tr>
<td>Moisture content</td>
<td>&lt; 0.2</td>
<td>weight-%</td>
<td>BIOTEC test directive</td>
</tr>
</tbody>
</table>

**PROCESSING**

BIOPLAST 105 was designed for use in injection moulding, but also can be processed in conventional equipment for sheet film extrusion (thermoforming) and blown film extrusion.

For further processing information, please refer to our specific “Configuration and Operating Guidelines”

**THERMAL PROPERTIES**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Typical value</th>
<th>Unit</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vicat A, softening temperature (VST/A120)</td>
<td>58</td>
<td>°C</td>
<td>EN ISO 306</td>
</tr>
</tbody>
</table>

**PRODUCTS MADE OF BIOPLAST 105**
- are biodegradable according to EN 13432
- are recyclable
- are printable by flexographic and offset printing without pretreatment
- can be coloured with masterbatches
- are sealable (hot, RF, ultra sonic)

**GENERAL APPLICATIONS**
- injection moulded articles (e.g. cutlery, medical devices, clips)
- semi-finished products
- thermoformed products (e.g. food trays)
- blend partner in combination with other BIOPLAST materials (e.g. BIOPLAST GF 106/02)

**SUSTAINABILITY**

BIOPLAST 105 contains 70% of renewable raw material and has a biobased carbon share of 67% according to ASTM D6866.

**END OF LIFE OPTIONS**

BIOPLAST 105 is compostable, recyclable and can be incinerated.

**COMPOSTABILITY**

Products made of BIOPLAST 105 are completely biodegradable and, depending on their thickness, compostable. The material is certified and registered by Vinçotte according to EN 13432 awarding the “OK compost” logo.
Quality and environmental management is a central component of BIOTec’s corporate strategy.

BIOTec has successfully implemented a Quality and environmental management System and is certified by TÜV Rheinland according to DIN EN ISO 9001:2008 and DIN EN ISO 14001:2004. The certifications include all services which BIOTec provides in connection with the development, production and marketing of BIOPLAST material.

Regular audits and training courses for the employees contribute to maintaining the high quality standard as well as the continuous improvement of the Quality and Environmental Management System.