

Product Texts

Compounded formulation comprising recycled polyethylene with 40 wt% FibraQ mixed via a Twin-screw extruder. The samples also include 3% coupling agent (conventional MAPE). No further additives were used, such as impact modifier or flowability aids, though they could be used to further improve some of the properties.

FibraQ is Biofiber Tech´s product, consisting of surface-modified wood fibers with enhanced hydrophobicity, low moisture absorption and high flowability within polymer matrices.

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|--|--------------|-------------|----------------------|
| ISO Data | | | |
| Melt flow index, MFI | 2.33 | g/10min | ISO 1133 |
| Temperature | 190 | °C | - |
| Load | 5 | kg | - |

| Mechanical properties | Value | Unit | Test Standard |
|---------------------------------------|--------------|-------------------|----------------------|
| ISO Data | | | |
| Tensile Modulus | 1150 | MPa | ISO 527 |
| Stress at break | 18.8 | MPa | ISO 527 |
| Strain at break | 11.6 | % | ISO 527 |
| Charpy impact strength, +23°C | 35.7 | kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength, +23°C | 9.27 | kJ/m ² | ISO 179/1eA |

| Other properties | Value | Unit | Test Standard |
|-------------------------|--------------|-------------------|----------------------|
| Density | 1070 | kg/m ³ | ISO 1183 |
| Biobased content | 40 | % | - |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|--|------------------|-------------|----------------------|
| Melt temperature | 165 - 185 | °C | - |

Characteristics**Processing**

Injection Molding

Certifications

Contains renewable resources, Recycled Resin Content

Delivery form

Pellets

Regional Availability

Europe