

Biocomposites by Stora Enso

Extrusion PE S30



storaenso

Technical Data Sheet

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Description

- Biocomposites for Extrusion
- Consists of a wood fiber reinforced polymer matrix
- Available with biobased or fossil based polymer (Eco-version)
- Can be colored with using standard masterbatches.

Typical applications

- Profile
- Tube
- Sheet
- Core Extrusion

Application areas

- PE grades are generally suitable for replacing the following polymers:
 - HDPE
 - PP
 - PVC
 - HDPE GF

Certifications & Compliance

- The grade(s) are in compliance with below regulation(s)*, as amended up to the date of issue.
 - EN 71-3, Safety for Toys
 - EU Legislation 1935/2004
 - EU Legislation 2023/2006
 - Plastic regulation EU/10/2011

Typical properties and technical data

| | Standard | PE 30 | Unit |
|-------------------------------------|--------------|-------|------------------------|
| Wood content (weight) | - | 30 | % |
| Density | ISO 1183 | 1,01 | g/cm ³ |
| MVR (220°C/10kg) | ISO 1133 | 3,9 | cm ³ /10min |
| Tensile strength | ISO 527-2/50 | 25 | MPa |
| Tensile modulus | ISO 527-2/2 | 3000 | MPa |
| Strain at break | ISO 527-2/50 | 4,5 | % |
| Flexural strength | ISO 178 | 34 | MPa |
| Flexural modulus | ISO 178 | 2500 | MPa |
| Charpy impact strength, 23°C | ISO 179/1eU | 13 | kJ/m ² |

When choosing an Eco grade (Eco Extrusion PE S30)

Our grades are available with ISCC+ certified polymer which guarantees that the fossil feedstock is replaced by renewable content. The renewable feedstock contains waste and residues from vegetable oil refining and cooking oil. The certification encompasses the entire value chain, including traceability to point of origin.

Environmentally friendly and Recyclable

All of our grades can be mechanically recycled. In general, it's preferred to separate Biocomposites from other materials to be fully re-manufactured. Biocomposites can be separated for recycling in various ways, including density-based and NIR-based methods. It has been tested that Biocomposites will not negatively effect a plastic waste stream. If instead incinerated, less fossil CO₂ will be released into the atmosphere, compared to a conventional polymer.

*Please note that restrictions may apply, contact your sales representative for more information.

Disclaimer

All information is based on Stora Enso's testing and experience and is accurate to the best of our knowledge at the date of publication. This document is designed to act as a help for safe and efficient processing Biocomposites and should not be taken as a guarantee or be used to disregard standard safety regulations. Depending on use the process and properties may differ.

Stora Enso batch #: PE S30