Biocomposites by Stora Enso

3D Ocean S50 Flex K

Technical Data Sheet Issued 2023-01-20

Description

- Biocomposites for granule 3D printing
- Consists of a wood fiber reinforced polymer matrix
- This grade is a combination of wood fibres and recycled polymer from the fishing industry
- Comes in the green color of the recycled polymer

Typical applications

- Furniture
- Toys
- Windows
- Decorative items

Application areas

- 3D grades are generally suitable for replacing the following polymers:"

ABS	PET-G
PLA	PPGF

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	3D Ocean S50 Flex K	Unit
Wood content (weight)	-	50	%
Density	ISO 1183	1,10	g/cm³
Tensile strength	ISO 527-2/50	33	MPa
Tensile modulus	ISO 527-2/2	2800	MPa
Strain at break	ISO 527-2/50	7,0	%
Flexural strength	ISO 178	44	MPa
Flexural modulus	ISO 178	2800	MPa
Charpy impact strength, 23°C	ISO 179/1eU	26	kJ/m2

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.