



Technical Data Sheet (TDS)

Bioblend LT25B

Revision Number 4.6

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Bioblend LT25B is a modified PLA-blend. The grade is enhanced with a blend of natural mineral fillers. Bioblend LT grades are easy to process and prepared for a fast and efficient post-processing crystallization/annealing process.

Bioblend LT25B is designed to be completely compostable/bio-degradable (microbial and enzymatic degradation) in the targeted disposal environment; it will compost in municipal/industrial facilities according to global standards like EN 13432 (for Europe) and ASTM D6400 (for the USA). The grade offers a significant reduction in carbon footprint compared to fossil-based plastics.

Bioblend LT grades are used for general purpose injection moulding applications. They are suitable for single-use applications (e.g. single-use cutlery, single-use food container, etc.), season-use applications (e.g. cups, tumblers, tooth-brushes, etc.) or even more durable applications (e.g. kitchenware, housings, etc.). Bioblend is currently considered the best replacement for melamine based products.

The grades exhibit excellent strength and stiffness properties as well as a good flow combined with improved elongation values. An increased rate of crystallization allows an annealing to a heat stable temperature of 120 °C (HDT-B) and above.

Bioblend LT25B is food grade safe; when annealed, the material grade is dishwasher-safe and microwave-safe.

Availability global

TYPICAL CHARACTERISTICS			
not annealed			
Property	Test Method	Unit	Typical Value*
Density		g/cm ³	1.3
Melt Flow Rate (190°C/2.16 kg)	ASTM D1238	g/10 min	> 70.0
HDT-B (@ 0.46 MPa)	ASTM D648	°C	54.2
Tensile Strength (50 mm/min)	ASTM D638	Mpa	51.7
Flexural Strength	ASTM D790A	Mpa	65.2
Flexural Modulus (1% secant)	ASTM D790A	Gpa	5.3
Elongation (50 mm/min) @ Yield	ASTM D638	%	7.5
Elongation (50 mm/min) @ Break	ASTM D638	%	31.0
IZOD Notched Impact Strength (@ 23°C)	ASTM D256	J/m	31.5'
Mold Shrinkage		%	0.45

TYPICAL CHARACTERISTICS			
post-process crystallization/annealing, 5 minutes @ 130 °C			
Property	Test Method	Unit	Typical Value*
Density		g/cm ³	1.3
HDT-B (@ 0.46 MPa)	ASTM D648	°C	> 125.0
Tensile Strength (50 mm/min)	ASTM D638	Mpa	37.3
Flexural Strength	ASTM D790A	Mpa	56.9
Flexural Modulus (1% secant)	ASTM D790A	Gpa	5.1
Elongation (50 mm/min) @ Yield	ASTM D638	%	7.5
Elongation (50 mm/min) @ Break	ASTM D638	%	9.5
IZOD Notched Impact Strength (@ 23°C)	ASTM D256	J/m	29.8 ¹

* Typical values; properties are minimum values and might be slightly higher than indicated (for density and mold shrinkage, maximum values, slightly lower). All mechanical properties as per ASTM D638 Type I specimen injection moulded in accordance with ASTM D4101.

Get in touch with our experts for more information.
support@nature2need.com
<http://nature2need.com>

The material has to be stored, handled and processed according to nature2need Safety Data Sheets (SDS) & Process Guidelines. In some cases, mold deposits may develop. These deposits shall be removed periodically; we recommend a mold cleaning cycle of every 5.000 shots. This information and data presented herein is true and best as per our knowledge. We make no warranty, expressed or implied, regarding the performance or otherwise. The user of the information is advised to obtain the latest details from the authorised representatives of the company, as the information is subject to change based on the research and development work undertaken by the company.