



BioPBS™ FZ78™ Technical Data Sheet

Fibers and Nonwoven

Product Description

BioPBS™ is bio-based polybutylene succinate (PBS) produced from polymerization of bio-based succinic acid and 1,4-butanediol. BioPBS™ is semi-crystalline polyester which provides softness and flexibility with good properties for fibers application.

Features:

- Good processability and wide processing operating window
- Using conventional fiber spinning machine
- High speed spin continuity of low denier fibers
- Uniform melt flow rate and low gels
- Soft and flexible
- Food contact approved by FDA (FCN No.1817) and JHOSPA, comply to EU10/2011
- Industrial compost certified by BPI in North America and ABA in Australia
- Compostability comply to EN13432
- Renewable content 51%

Typical applications:

- Staple fiber
- Continuous filament
- Spunbond nonwoven fabric

Properties*	Test Method	Unit	FZ78™
Density	ASTM D792	g/cm ³	1.26
Intrinsic Viscosity**	ASTM D4603	g/dL	1.5
MFR (190°C, 2.16 kg)	ASTM D1238	g/10 min	22
Melting Temperature	ASTM E794-06	°C	115
Tenacity***	ASTM D2256	g/d	3
Elongation***	ASTM D2256	%	200

* Typical properties; not to be construed as specifications

** IV measured at 1.0g/dL in PTM-11 (mixed solvent of Phenol and 1,1,2,2 – Tetrachloroethane 1:1) at 30°C

*** Tenacity and elongation obtained from POY 6 dpf with spinning speed 1500 m/min, Screws with L/D ratios of 30:1, Typical melt spinning temperatures are 200-220°C.

Supplied form, storage condition and drying condition

BioPBS™ pellet is dried and packed in aluminum-lined packaging before delivering to customers. The recommended moisture content to prevent potential loss of properties is less than 200 ppm. Typical drying conditions are 80°C for at least 5 hours at a dew point of -40°C or lower.

Do not store outdoors. Keep dry at ambient temperature. Avoid humid environment, heat and direct sunlight. Use material within 6 months after delivery date, in order to prevent possible material quality deterioration.