



Product Information

FZ91PD for Paper Lamination

Product Description

BioPBS is bio-based polybutylene succinate (PBS) produced from polymerization of bio-based succinic acid and 1,4-butanediol. Alike LDPE, BioPBS is soft and flexible semi-crystalline polyester with excellent properties suitable for extrusion lamination, blown film extrusion, casting, and injection molding.

Properties	Test Method	Unit	FZ91PD
Density	ISO 1183	g/cm ³	1.26
MFR (190°C, 2.16 kg)	ISO 1133	g/10 min	5
Melting Point	ISO 3146	°C	115
Yield Stress	ISO 527-2	MPa	40
Stress at Break	ISO 527-2	MPa	30
Strain at Break	ISO 527-2	%	160
Flexural Modulus	ISO 178	MPa	650
Flexural Strength	ISO 178	MPa	40
Izod Impact Strength (23°C)	ISO 180	kJ/m ²	7
Heat Deflection Temperature (0.45 Mpa)	ISO 75-1	°C	91
Rockwell Hardness	ISO 2039-2	R Scale	102

Process Information

BioPBS is dried and packed in aluminum-lined packaging before delivering to customers. Pre-dry of the unopened BioPBS is not necessary. We recommend keeping packages sealed until ready to process and using up the whole 25-kg bag. Unused material should be tightly sealed, kept away from open air, and pre-dried to moisture content of less than 700 ppm prior to using next time.

Recommended Processing Parameters	
Melt Temperature	200-220°C
Feed Throat	130°C
Barrel Temperature	180-220°C
Adapter Temperature	200-220°C
Die Temperature	200-220°C
Chill Roll Temperature	15°C



Compostability

BioPBS FZ91PD meets the requirements of European standard EN13432, USA standard ASTM D6400, and GreenPla mark in Japan to be compostable into carbon dioxide, water, and minerals that do not adversely affect the quality of compost. Additionally, FZ91PD is naturally compostable at 30°C, with the existence of moisture and bacteria, into water*. Consumers can enjoy their favorite food and drink, and then throw away BioPBS paper into regular trash bin and let the nature works on compostable.

* PBS film of 200 µm can be biodegraded within 1 year at 30°C and 50% RH in soil.

Food Contact Compliance

BioPBS FZ91PD is in the positive list for use in food containers, packaging materials, and utensils of The Japan Hygienic Olefin and Styrene Plastics Association (JHOSPA) in Japan, and in compliance with the Commission Regulation (EU) No. 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food up to 100°C for 4 hours.

Notice to Customer

Information in this document is based on our current knowledge and experience. It does not relieve customers of the responsibility to carry out their own tests and experiments nor do they imply any legally binding assurance. Customers are responsible to determine their freedom-to-operate to ensure that that their products do not infringe any intellectual properties. PTT MCC Biochem Company Limited assumes no obligation or liability for the information in this document.

For more information, please contact

PTT MCC Biochem Company Limited
555/2 Engergy Complex Building B, 14th Floor,
Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900 Thailand
Email: sales@pttmcc.com
Office: +66 (0) 2140 3555