

# BioPBS™ FZ71PM / FZ71PB Technical Data Sheet

## Injection molding for general purpose

### 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 injection molding articles for general purpose.

### Features:

- Good processability and flow ability, easy ejection of parts from the mold
- Soft and flexible, good impact property
- Good dimensional stability
- Short cycle time
- Superior heat resistance compared to other bioplastics
- FZ71PM is food contact grade, approved by FDA (FCN No.1817) and JHOSPA, comply to EU10/2011
- OK COMPOST certified by TUV Austria in European Union, BPI in North America and ABA in Australia
- Renewable content certified by DIN CERTCO, JBPA and USDA

Properties	Test Method	Unit	FZ71PM/FZ71PB
Density	ISO 1183	g/cm <sup>3</sup>	1.26
MFR (190°C, 2.16 kg)	ISO 1133	g/10 min	22
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	%	170
Flexural Modulus	ISO 178	MPa	630
Flexural Strength	ISO 178	MPa	40
Izod Impact Strength (23°C)	ISO 180	kJ/m <sup>2</sup>	7
Heat Deflection Temperature (0.45 MPa)	ISO 75-1	°C	95
Rockwell Hardness	ISO 2039-2	R Scale	107



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## Process Information

Recommended Processing Parameters	
Nozzle	190°C
Front Cylinder	200°C
Middle Cylinder	190°C
Rear Cylinder	180°C
Hopper	60°C
Mold	25-40°C
Mold shrinkage	1.4%

## Supplied form, storage condition and drying condition

BioPBS™ pellet is dried and packed in aluminum-lined packaging before delivering to customers.

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.

Pre-dry of the unopened BioPBS™ is not necessary. It is recommended to keep 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 (Temperature 80°C for over 5 hours) to moisture content of less than 1,000 ppm (preferable less than 700 ppm) prior to using next time.



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