

## BioPBS™ FD92PM / FD92PB Technical Data Sheet

### Film

#### 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 both blown and cast film extrusion.

#### Features:

- Good processability and stable bubble in existing LDPE machine
- Suitable as sealant layer for flexible packaging
- Suitable to other blown film applications, i.e., bag liners, mulch film, agricultural film, etc.
- FD92PM is food contact grade, comply to EU10/2011
- OK COMPOST HOME and OK Biodegradable SOIL certified by Vincotte in European Union
- Compostable certified by BPI in North America
- Renewable content certified by DIN CERTCO and JBPA

Properties		Test Method	Unit	FD92PM/FD92PB
Density		ISO 1183	g/cm <sup>3</sup>	1.24
MFR (190°C, 2.16 kg)		ISO 1133	g/10 min	4
Melting Point		ISO 3146	°C	84
Tensile Modulus	MD	ISO 527-3	MPa	280
	TD			320
Yield Stress	MD	ISO 527-3	MPa	18
	TD			17
Stress at Break	MD	ISO 527-3	MPa	32
	TD			27
Strain at Break	MD	ISO 527-3	%	600
	TD			580
Elmendorf tear strength	MD	ISO 6383-2	N/mm	2
	TD			5
Puncture Impact		PTTMCC method	kJ/m	6

Fabrication conditions: B.U.R 2.5, Film thickness 20 µm



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 their products do not infringe any intellectual properties. PTT MCC Biochem Company Limited assumes no obligation or liability for the information in this document

## Process Information

Recommended Processing Parameters	
Temperature	130-150°C
Die lip gap	0.8-1.0 mm
Blow up ratio	2-4

## 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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**COMPOSTABLE**  
IN INDUSTRIAL FACILITIES  
Check locally, as these do not exist in many communities. **Not suitable for backyard composting.**  
CERT # 10528580



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