

REINVENTING LIVING GREEN



Biopos™



www.pttmcc.com



Biopos™

Renewable . Compostable . FCN Approved

PTTMCC Facts & Figures



The world's 1st
and **largest**
BioPBS™ Plant

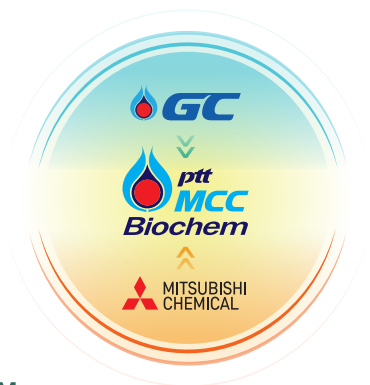
PTTMCC is dedicated to produce BioPBS™ with **20,000 Tons** annual capacity, plant based in Rayong Thailand

BioPBS™ partially (bio-based polybutylene succinate) is revolutionary in its two-fold bio properties. It is both bio-based and biodegradable plastics, naturally decomposes into biomass, CO₂, H₂O. BioPBS™ with higher bio-content is developing and will introduce in the future.

BioPBS™ has been used in wide range applications: paper coating, compounding, synthetic fiber, flexible and barrier packaging and durable product.

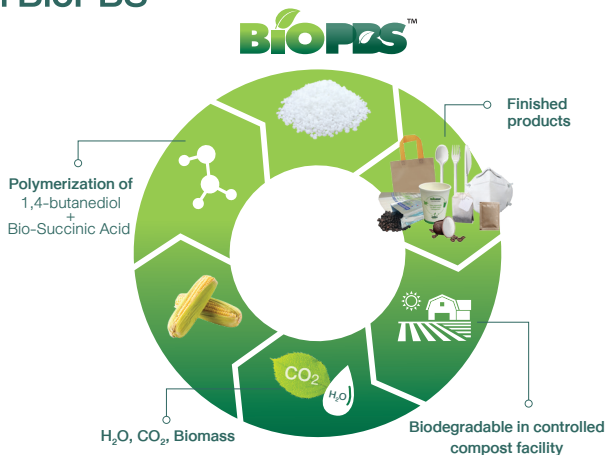


BioPBS™ has exclusive license from Mitsubishi Chemical Corporation Patents.



Closed Loop Formula with BioPBS™

- **BioPBS™** containing renewable carbon.
- **BioPBS™** fully biodegradable even at ambient temperature and compostable (EN13432).
- **BioPBS™** compatible with end-of-life both recycling (repulping operation) and composting even in backyard.
- **BioPBS™** is contribution to circular economy.
- **BioPBS™** safe for you and planet. It is food contact, approved by FDA, EU and JCI.
- **BioPBS™** has processability similar to Polyethylene (PE).



Application

bioPBS™

BioPBS™
Grade



Repulpable &
Recyclable



Industrial
Compostable



Home
Compostable



**Barrier
packaging**
(The best sealant layer)

FD92PM



Paper coating
(The best bioplastic
for paper coating)

FZ79AC

FX83AC

FX85AC



**Coffee capsule/
Cutlery**
(Increase impact strength)

FZ71PM

FZ91PM



Synthetic fiber
(Increase heat stability)

FZ78TM



*Only in combination with paper,
each customer shall test and certify their product by themselves due to different paper type.

Certification & Compliance



**Biodegradability &
Compostability**



Bio-Based



Food Contact



Repulpability*



No.299/No.300
PTT MCC Biochem Company Limited



FCN

FZ-Grade: FCN# 1817
FD-Grade: FCN# 1818

China National Food
Safety Standard (GB)

JCII



EU No.10/2011





recyclable



certified at WMU



* For Papercoating

Properties	Test Method	Unit	BioPBS™		
			FZ71 (PM/PB)	FZ91 (PM/PB)	FD92 (PM/PB)
Density	ISO 1183	g/cm ³	1.26	1.26	1.24
MFR (190°C, 2.16 kg)	ISO 1133	g/10 min	22	5	4
Melting Point	ISO 3146	°C	115	115	84
Yield Stress	ISO 527-2	MPa	40	40	17
Stress at Break	ISO 527-2	MPa	30	36	24
Strain at Break	ISO 527-2	%	170	210	380
Flexural Modulus	ISO 178	MPa	630	650	250
Flexural Strength	ISO 178	MPa	40	40	18
Izod Impact Strength (23°C)	ISO 180	kJ/m ²	7	10	47
Heat Deflection Temperature (0.45 MPa)	ISO 75-2	°C	95	95	63
Rockwell Hardness	ISO 2039-2	R Scale	107	107	56
Compostability			 Industrial		 Industrial <hr/>  Home

*PM grades are intend to come into contact with food applications.



Renewable . Compostable . FCN Approved

PTT MCC BIOCHEM COMPANY LIMITED
 555/2 Energy Complex Building B, 14th Floor
 Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900, Thailand
 Tel/Fax: +66 (0) 2140 3555/+66 (0) 2140 3556
www.pttmcc.com
 Email: sales@pttmcc.com