Whitepaper MFR16-20

Biobased PBS

Biobased Polybutylene succinate





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Grade

TH803S

Molecular Formula

 $HO-(CO-(CH_2)_2-CO-O-(CH_2)_4-O)_n-H$

Cas no

25777-14-4

Color

Natural white

Raw Material

- BDO (1,4-butanediol);
- Bio Succinic Acid.

Application

- Injection Molding;
- Thermal Forming;
- Extrusion.

Max Thickness of Film

68µm

Package

- 25kg aluminum bag, each 20' container can load 17mt;
- 800kg aluminum big bag, each 20' container can load 16mt.







Technical Data

Typical Property	Unit	16-20	Method
Density	g/cm³	1.27	ISO 1183
MFR (190°C,2160g)	g/10min	16-20	ISO 1133
Carboxyl End Groups	Mol/mt	15-20	GB/T14190
Moisture	%	≤0.05	GB/T14190
Melting Point	°C	114	ISO 11357
Hundred-grain Weight	g/100 grain	1.6	/
Shore Hardness	D/15	68	ISO868
Tensile Strength	MPa	38	ISO527
Elongation	%	270	ISO527
HDT B/Tff0.45	°C	90	ISO75-1:2013&ISO75-2:2
Flexural Strength	MPa	34	ISO178:2010/Amd.1:2013
Flexural Modulus	MPa	610	ISO178:2010/Amd.1:2013
Izod Impact Strengt	KJ/m²	6	ISO180:2000/Amd.2:2013

Storage

Temperatures during transportation and storage should not exceed 40°C. Keep resin in dry and ventilated warehouse to prevent moisture. Avoid contacting with soil, water and sludge, and no exposure to direct sunlight and extreme temperature. The maximum shelf life is 2 years in ambient temperature of 23°C if the package has been tightly sealed.

Drying

It is recommended to pre-dry the material prior to getting the best processing performance. If the moisture of the resin is less than 0.05% pre-drying may not be needed. Typical drying conditions:2 hours at 80oC (175°F).

Processing Guide

TH803S can be independently used in the ordinary injection molding machine for processing, it can also be blended with PLA.







Why PycnoPlast?

Providing environmentally friendly polymer solutions

PycnoPlast is continuously developing innovative plastic solutions and functionality improvement of polymer based products. We do this in close cooperation with our customers.



Biopolymers

Biopolymers are raw materials of the future for all current disposable plastic applications.
Bringing plastic products back to nature after usage via bio degradable polymers.



Features

Main features of our biopolymers are: biodegradability, biobased, food approved and processable with conventional equipment.



Applications

Our biopolymer solutions are suitable for bags, films, thermoformed packaging, paper coating, injection molding and textile (nonwoven) applications.



Tailored solutions

PycnoPlast can develop and produce tailor made polymer solutions as masterbatch or compound to meet your specific requirements.







Feel free to contacting us

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