Whitepaper PBAT

PBAT

Poly(butylene adipate-co-terephthalate)





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Grade

TH801T

Molecular Formula

 $H-(O-(CH_2)_4-O-CO-(CH_2)_4-CO-)_n-(O-(CH_2)_4-O-CO-(CH_2)_6-CO-)_m-H$

Cas no

55231-08-8

Color

Natural white

Raw Material

- BDO (1,4-butanediol);
- PTA (terephthalic acid);
- Adipic Acid.

Application

- Shopping bags;
- Mulching films;
- Paper coating;
- Labels;
- Other package materials.

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	Method	Result
Density	g/cm³	ISO 1183	1.21
MFR 190°C, 2160g	g/10min	ISO 1133	2.5~4.5
Melting Point	°C	ISO 11357	116~122
Vicat A/50	°C	ISO 306	≥80
Tensile Strength	MPa	ISO 527	≥25
Elongation	%	ISO 527	≥400
Moisture	%		≤0.06

Max Thickness of Film

61µm

Storage

Temperatures during transportation and storage should not exceed 70°C. Keep resin in dry and ventilated warehouse to prevent moisture. Avoid contacting with soil, water and sludge, and exposing 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 0.3% pre-drying may not be needed. Typical drying conditions:2 hours at 80°C (175°F).

Processing Guide

TH801T is not suitable for direct film blowing, it is suggested to add slip additive like SiO2 or CaCO3, it can also be blended with starch, PLA, PHA, cellulous etc.. Normally the extrusion temperature is 140°C -160°C, it is important to make sure the blowing machine starts from the lowest temperature. If the blowing performance is not optimized it is recommended to increase the temperature by 5°C.

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

PycnoPlast BV

info@pycnoplast.com +31 (0)6 22 503 282

Achtseweg Zuid 161
5651 GW Eindhoven
the Netherlands
(Strijp-T Building TAB 161 G)

IBAN: NL40 TRIO 0212 1274 54

VAT number: 856039573B01

CoC number: 65256425



