

PBAT-TDS

Company identification

Company: Shandong Dawn Polymer Co.,Ltd Address: Dawn Economic Park,Zhenxing Road,Longkou Development Zone,Longkou City,Shandong Province

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Product Information: Biodegradable Polymers DAWNECO-0101

Product description:

Dawn's PBAT DAWNECO-0101 is completely compostable according to various international standards and regulations like European standard EN 13432 and American Standard ASTM 6400, which will be eventually biodegraded to carbon dioxide, water and biomass when metabolized in the soil or compostable under standard conditions. Our resins are also certified by Ok Compost, BPI, ABAM, JBPA, FDA, EU Food Contact regulations, etc. Compared with other biodegradable plastics, PBAT has excellent mechanical performance, almost same as PP and PE, good heat resistance and outstanding processability allow it to be variously processed on conventional blown film plants, it is one of the best biodegradable plastic in terms of processability in current market and can be blended with a great quantity of calcium carbonate and starch etc. to produce cost effective products.

PBAT: Poly(Butylene Adipate-co-Terephthalate)

Grade: DAWNECO-0101

Molecular formul:

$$\left. \left. \left. \left(\mathsf{OCH}_2\mathsf{CH}_2\mathsf{CH}_2\mathsf{CH}_2\mathsf{CH}_2\mathsf{OC} - \mathsf{CH}_2$$

CAS NO: 55231-08-8

Color: Natural whit

Raw material:

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



Application:

Film bags, mulching films, paper coating, labels, 3D printing

Technical Data Sheet:

Typical Property	Unit	Test Method	DAWNECO-0101
Mass density	g/cm3	ISO 1183	1.21-1.25
Melt flow rate MFR	g/10 min	ISO 1133	2.5~4.5
190 °C, 2.16kg			
Melting point	C	ISO 11357	116~122
Vicat VST A/50	C	ISO 306	≥80
Tensile Strength	MPa	ISO 527	≥20
Elongation at break	%	ISO 527	≥500
Moisture	%		≤0.06

Package:

25kg aluminum bag, each 20' container can load 17mt;

800kg aluminum big bag, each 20' container can load 16mt.

Storage:

Temperatures during transportation and storage should not exceed 70 \mathbb{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 s helf life is 2 years in ambient temperature of 23 \mathbb{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 70 \mathbb{C} (158 F).

Processing Guide:

DAWNECO-0101 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 \degree -160 \degree , 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 \degree .