

## PBS - TH803SG - Bio / High flow

### Description

PBS - TH803SG, is a bio-degradable aliphatic co-polyester, characterized by a high flow properties. TH803SG - Bio is for almost 50% polymerized from bio-based succinic acid, coming from beans of the Ricinus tree. Once exposed to environments where composting micro-organisms are present, PBS resin degrades into water, CO<sub>2</sub> and biomass, with a speed depending on the dimensions, material structure and the external circumstances. In non-composting environments products made with PBS have durable properties. These properties are in many ways comparable to PP. The PBS - grade TH803SG is especially suitable for melt blown applications or other processes where high fluidity is needed.

### Characteristics

Typical property	Unit	Method	Grade 800	Grade 1500
			Value	Value
MFR 160°C, 2,16 kg	g/10 min	ISO 1133		~150
MFR 190°C, 2,16 kg	g/10 min	ISO 1133		~300
MFR 230°C, 2,16 kg	g/10 min	ISO 1133	400-800 (± 50)	800-1500 (± 100)
Density	g/cm <sup>3</sup>	ISO 1183	1,20-1,26	
Melting point	°C	ISO 11357	114	
Moisture	%	GB/T14190	≤0,1	
Color			Milk white to light yellow	

### Bio-degradability

Home compostability according EN13432, certified by TÜV Austria, for films < 45 µm  
Industrial compostability according EN13432, certified by TÜV Austria, for films < 80 µm

### Food approval

PBS TH803SG is approved for food contact applications, according EC Regulation No 10/2011

### Packaging

25 kg aluminum bag, a 20 ft container can load 17 MT  
800 kg aluminum big bag, a 20 ft container can load 16 MT

### 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 8 months in ambient temperature of 23 °C if the package has been tightly sealed.

### Processing recommendations

For meltblown processes, the typical extruder setting is 180 - 240 °C to have good flow performance. It is recommended to pre-dry the material prior to getting the best processing performance. Typical drying condition is 3 hours at 70 °C.

### Suggested applications

Compostable and bio-sourced melt blown products for:

- Horti- or agricultural applications
- Textiles and textile lamination

Plasticizer in Bio-compounds

Note: The information and statements herein are believed to be reliable, but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own purpose of any products or information referred to herein.

No warranty for fitness to a particular purpose is made. Nothing herein is to be taken as permission or recommendation to practice any patented invention without a licence.

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