

# GPM Fully Biodegradable Plastics GPM 8 S801

Starch Filling Series-Filling with PLA

Blown Film Grade Biodegradable Material

Version: 1.0 Issue Time: May 29, 2023

Product Features:	Biodegradable	
	Compostable	
Typical application fields:	Packaging film	
Form:	Pellets, 25 kg / bag or 800 kg / bag	

#### Film Performance:

Film Thickness 40 um					
Properties <sup>[1]</sup>	Test Method	Units	Values <sup>[2]</sup>		
Tensile strength MD/TD	ISO 527-3	MPa	24/26		
Elongation at Break MD/TD	ISO 527-3	%	700/660		
Tear Strength MD/TD	ASTM D 1922	N/mm	73		
Dart Drop	ISO 7765	g	550		
Safe Load-Bearing	-	kg	7.5		
Film Density	-	g/cm3	1.29		
[1] Not to be construe as specifications.					
[2] The listed values are measured by test specification and used for referential purpose only.					

### **Processing and Handling Information:**

### **1. General Requirements:**

GPM 8 S801 is a starch-based biodegradable blown film material. Moisture can cause hydrolysis of the material, and residual moisture above 2 ppm can lead to defects such as fish eyes during processing.

## 2. Transportation and Storage

Transport and storage temperatures should not exceed 70°C. The unopened material can be stored at normal temperature ( $23^{\circ}$ C) for 12 months. The product in complete package can be used directly. If the package is damaged, it needs to be dried before use, because moisture above 1000ppm will affect the blown film process, and the effective drying condition is 90°C for 1 hour. Dried products need to be protected from moisture.

Setting		Start Point	Range
Melting Temperature		<b>115</b> ℃	<b>100-120</b> ℃
Heating Temperature of Blowing Film	Posterior Segment	<b>140</b> °C	<b>135-145</b> ℃
	Middle Segment	<b>140</b> °C	<b>135-145</b> ℃
	Anterior Segment	<b>150</b> °C	<b>145-155</b> ℃
Die Temperature		<b>160</b> °C	<b>150-165</b> ℃
Processing Temperature Limit		<b>190</b> °C	
Pre-drying Conditions		90°C, 1 hr	

## 3. Blowing Film Processing Parameters:

\* The above data are typical values and should not be interpreted as technical indicators for judging quality.



### Statement

All test conditions and standards are listed, the dates are for reference only, the test performance will vary with the processing method and conditions. Environmental conditions can affect the performance of the material, and the product needs to be used as soon as possible after opening.



