

# Plantic® WR700

Biodegradable Polymers

Plantic Technologies Limited

## Message:

Plantic Technologies Limited develops and produces advanced bio-based materials. Plantic® is an innovative product made from corn-starch (maize) that is Australian grown and non-genetically modified. Plantic® is an Australian registered trademark of Plantic Technologies Limited.

Plantic® WR700 is a thermoplastic starch (TPS) polymer formulated for injection molding. It has been designed to be used in applications requiring water resistance for periods of up to 12 weeks. It is suitable for molding parts with a wall thickness between 0.5 - 3.0 mm.

General Information			
Features	Biodegradable		
	Moisture Resistant		
	Renewable Resource Content		
Uses	Thin-walled Packaging		
Forms	Granules		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.35	g/cm <sup>3</sup>	ASTM D792
Molding Shrinkage - Flow	0.60 to 0.90	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	52		ASTM D2240
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	630	MPa	ASTM D638
Tensile Strength (Yield)	< 7.50	MPa	ASTM D638
Tensile Elongation (Break)	2.0	%	ASTM D638
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	31	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (0.45 MPa, Unannealed)	44.9	°C	ASTM D648
Vicat Softening Temperature	70.2	°C	ASTM D1525
Injection	Nominal Value	Unit	
Drying Temperature	70.0	°C	
Drying Time	3.0 to 4.0	hr	
Suggested Max Moisture	2.0 to 3.0	%	
Rear Temperature	110 to 150	°C	
Middle Temperature	150 to 170	°C	
Front Temperature	160 to 180	°C	
Nozzle Temperature	170 to 190	°C	
Processing (Melt) Temp	175 to 200	°C	

Mold Temperature	25.0 to 50.0	°C
Back Pressure	0.00 to 10.0	MPa
Screw Speed	50 to 150	rpm

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519  
Phone: +86 13424755533  
Email: sales@su-jiao.com  
No. 215, Lianhe North Road, Fengxian District, Shanghai, China

