

ESTERGLAS™

PROPERTY	Test Method/Cert	EsterGlas 27	EsterGlas 01	EsterGlas HP
Physical				
Specific Gravity	ASTM D 792	1.34	1.33	1.34
Intrinsic Viscosity	ASTM D 4603	0.80	0.80 ±0.02	
Melt Flow (200°C/5kg)	ASTM D 1238			9.45
Mold Shrinkage	ASTM D 955	.004		.003-.006
Food Contact Acceptable	FDA 21 CFR 177.1830	Compliant	Compliant	Compliant
Mechanical				
Tensile Strength @ Break	ASTM D 638		8510 psi	8090psi
Flex Modulus	ASTM D 790	2592.4MPa (375,330 psi)	346,000 psi	356,000
Flex Strength @ Yield	ASTM D 790	79.3 MPa (11,508 psi)		
Tensile Modulus	ASTM D 638	947.2 MPa (137,378 psi)		279,000 psi
Elongation	ASTM D 790	81.5%	556%	179%
Rockwell Hardness	ASTM D 785	103	82 Shore D	92 Shore R
Unnotched Izod (0.125 in @73°F) (@32°F)	ASTM D 265		NB	NB
Thermal				
Deflection Temp [@ .0455 MPa (66psi)]	ASTM D 648	155°F(68°C)	153°F (67°C)	155F
Vicat Softening Temp. [@ 1kg load]	ASTM D 1525	177°F (80°C)		178F
Flammability Classification [3.2 mm(.125 in)]	UL 94	V-2	HB	
Additional: Dishwasher Safe		Top Rack	Top Rack	Top Rack
Recommended Processing				
Drying Temperature		4-6 hours @ 300°F (149°C)	4-6 hours @ 300-340°F(149-171°C)	4-6 hours @ 300°F (149°C)
Rear Temperature		500-520°F (260-271°C)	480-490°F (249-254°C)	500-560 °F (260-293°C)
Middle Temperature		510-540°(266-282°C)	490-500°F (254-260°C)	510-570 °F (266-299°C)
Front Temperature		520-550°F (271-288°C)	490-500°F (254-260°C)	520-580 °F (271-304°C)
Nozzle/Die Head Temp		510-540°F (266-282°C)	490-500°F (254-260°C)	520-580 °F (271-304°C)
Processing (Melt) Temp		520-555°F (271-291°C)	500°F	520-580 °F (271-304°C)
Mold Temperature		80-90°F (27-32°C)	70-100°F (21-38°C)	45 - 80 °F (7-27°C)
Back Pressure		50-200 psi (0.34-1.38 MPa)	50-75 psi	75-125 psi (0.52-0.86 MPa)
Screw Speed		40-80 rpm	Medium to fast rpm	70-125 rpm

The information provided above is based upon typical values. Typical values are intended only as guides. Each customer is responsible for determining whether products and information in this document are appropriate for the customer's use. **NO GUARANTEES OR WARRANTIES ARE EXPRESSED OR IMPLIED.**