

Product Data Sheet

EsterGlas® 27

IM/ISBM/EX/EBM

Product Description: EsterGlas™ is a Clear APET resin that combines crystal clarity and rigidity with superior toughness.

Typical Material Properties

General Properties	Test Method / Cert.	Typical Values
Specific Gravity	ASTM D 792	1.34
Intrinsic Viscosity		.80
Mold Shrinkage	ASTM D 955	.004 in
Food Contact Acceptable	FDA 21 CFR 177.2420	Compliant

Mechanical Properties

Tensile Modulus	ASTM D 638	947.2 MPa (137,378 psi)
Tensile Elongation @ Break	ASTM D 638	81.5%
Flexural Modulus	ASTM D 790	2592.4 MPa (375,990 psi)
Flexural Strength @ Yield	ASTM D 790	79.3 MPa (11,508psi)
Hardness	ASTM D 785	103 R

Thermal Properties

Deflection Temp. [@ 0.455 MPa (66psi)]	ASTM D 648	155°F (68.2°C)
Vicat Softening Temp. @ 1KG Load	ASTM	177°F (80.4)
Flammability Classification [3.2 mm (.125 in.)]	UL 94	V-2

Additional: Dishwasher safe – top rack

Recommended Processing

Drying Temperature	4-6 hours@300°F (148.9°C)
Rear Temperature	490-540 °F (254-282°C)
Middle Temperature	480-550 °F (249-288°C)
Front Temperature	480-550 °F (249-288°C)
Nozzle/Die Head Temperature	480-550 °F (249-288°C)
Processing (Melt) Temp	480-550 °F (249-288 °C)
Mold Temperature	80 - 90 °F (27-32°C)
Back Pressure	50-200 psi (0.34-1.38 MPa)
Screw Speed	40-80 rpm

Desiccant dryers must be used 300F for a minimum of 4-6 hrs., dew point temperature optimum of -40F.

Improperly dried material can produce parts with less than optimal physical properties.

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.**