

ESPREE™ ABS30GF

Acrylonitrile Butadiene Styrene
SABIC Innovative Plastics

Technical Data

Product Description

ESPREE™ ABS30GF is an Acrylonitrile Butadiene Styrene (ABS) product filled with 30% glass fiber. It can be processed by injection molding and is available in North America.

General

Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Forms	• Pellets
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Specific Gravity	1.25	1.25 g/cm³	ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 2.0E-3 in/in	0.10 to 0.20 %	ASTM D955
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ³ (Yield, 0.125 in (3.18 mm))	12000 psi	82.7 MPa	ASTM D638
Flexural Modulus ⁴ (0.125 in (3.18 mm))	1.00E+6 psi	6890 MPa	ASTM D790
Flexural Strength ⁴ (0.125 in (3.18 mm))	15000 psi	103 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact 73°F (23°C), 0.125 in (3.18 mm)	1.0 ft-lb/in	53 J/m	ASTM D256
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	215 °F	102 °C	ASTM D648

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	190 °F	87.8 °C
Drying Time	2.0 hr	2.0 hr
Drying Time, Maximum	4.0 hr	4.0 hr
Processing (Melt) Temp	450 to 500 °F	232 to 260 °C
Mold Temperature	120 to 150 °F	48.9 to 65.6 °C
Back Pressure	100 to 300 psi	0.689 to 2.07 MPa
Screw Speed	30 to 60 rpm	30 to 60 rpm