

Arnite® B436 SE

Envalior - *Polybutylene Terephthalate*

General Information

Product Description

30% Glass Fiber Reinforced, Flame Retardant

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Features	• Flame Retardant
Processing Method	• Injection Molding
Resin ID	• PBT-GF30 FR(17)

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.67	g/cm ³	ISO 1183
Water Absorption (Saturation, 73°F)	0.30	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.15	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.52E+6	psi	ISO 527-1
Tensile Stress (Break)	15200	psi	ISO 527-2
Tensile Strain (Break)	1.7	%	ISO 527-2
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	2.9	ft·lb/in ²	
73°F	2.9	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	21	ft·lb/in ²	
73°F	21	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	428	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ISO 75-2/A
Melting Temperature ²	437	°F	ISO 11357-3
CLTE - Flow	1.9E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	3.9E-5	in/in/°F	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	> 1.0E+13	ohms·m	IEC 62631-3-1
Electric Strength	710	V/mil	IEC 60243-1
Relative Permittivity			IEC 62631-2-1
100 Hz	4.10		
1 MHz	3.90		
Dissipation Factor			IEC 62631-2-1
100 Hz	2.0E-3		
1 MHz	0.015		
Comparative Tracking Index (CTI)	PLC 2		UL 746A
Comparative Tracking Index	250	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Glow Wire Flammability Index (0.06 in)	1760	°F	IEC 60695-2-12

