

**Arnite® B434 SE**

Envalior - Polybutylene Terephthalate

## General Information

**Product Description**

20% Glass Fiber Reinforced, Flame Retardant

**General**

Material Status	<ul style="list-style-type: none"> <li>Commercial: Active</li> </ul>
Availability	<ul style="list-style-type: none"> <li>Africa &amp; Middle East</li> <li>Asia Pacific</li> <li>Europe</li> <li>Latin America</li> <li>North America</li> </ul>
Filler / Reinforcement	<ul style="list-style-type: none"> <li>Glass Fiber, 20% Filler by Weight</li> </ul>
Features	<ul style="list-style-type: none"> <li>Flame Retardant</li> </ul>
Processing Method	<ul style="list-style-type: none"> <li>Injection Molding</li> </ul>
Resin ID	<ul style="list-style-type: none"> <li>PBT-GF20 FR(17)</li> </ul>

 Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	1.59	g/cm <sup>3</sup>	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	1.16E+6	psi	ISO 527-1
Tensile Stress (Break)	15200	psi	ISO 527-2
Tensile Strain (Break)	2.4	%	ISO 527-2
Flexural Modulus	1.09E+6	psi	ISO 178
Flexural Stress	21800	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	2.9	ft·lb/in <sup>2</sup>	
73°F	2.9	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	19	ft·lb/in <sup>2</sup>	
73°F	19	ft·lb/in <sup>2</sup>	
Unnotched Izod Impact Strength (73°F)	14	ft·lb/in <sup>2</sup>	ISO 180/1U
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 <sup>2</sup>	437	°F	ISO 11357-3
CLTE - Flow	2.2E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	4.4E-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	690	V/mil	IEC 60243-1
Relative Permittivity			IEC 62631-2-1
100 Hz	3.90		
1 MHz	3.70		
Dissipation Factor			IEC 62631-2-1
100 Hz	2.0E-3		
1 MHz	0.015		
Comparative Tracking Index	250	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flammability Classification (0.06 in)	V-0		IEC 60695-11-10, -20

