

**Arnite® TV4 461 KL**

 Envalior - *Polybutylene Terephthalate + PET*
**General Information**
**Product Description**

30% Glass Fiber Reinforced, Heat Stabilized, UV Stabilized, Excellent Surface Properties

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Additive	• Heat Stabilizer	• UV Stabilizer	
Features	• Good Surface Finish	• Heat Stabilized	• UV Stabilized
	• Good Weather Resistance	• Outstanding Surface Finish	
Processing Method	• Injection Molding		
Resin ID	• (PBT+PET)-GF30		

**Properties <sup>1</sup>**

<b>Physical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Density	1.53	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow	1.1	%	
Flow	0.32	%	
Water Absorption (Saturation, 73°F)	0.30	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.15	%	ISO 62
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Modulus	1.44E+6	psi	ISO 527-1
Tensile Stress (Break)	18900	psi	ISO 527-2
Tensile Strain (Break)	2.4	%	ISO 527-2
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	4.3	ft·lb/in <sup>2</sup>	
73°F	4.3	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	21	ft·lb/in <sup>2</sup>	
73°F	21	ft·lb/in <sup>2</sup>	
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (66 psi, Unannealed)	437	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	401	°F	ISO 75-2/A
CLTE - Flow	2.2E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	3.3E-5	in/in/°F	ISO 11359-2
<b>Electrical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Volume Resistivity	> 1.0E+13	ohms·m	IEC 62631-3-1
Relative Permittivity			IEC 62631-2-1
100 Hz	4.10		
1 MHz	3.90		
Dissipation Factor			IEC 62631-2-1
100 Hz	1.5E-3		
1 MHz	0.016		
Comparative Tracking Index (CTI)	PLC 2		UL 746A
Comparative Tracking Index	275 V		IEC 60112

