

Product Texts

Laser Transparent Black, Laser Weldable

ISO 1043 PBT-GF30

Arnite® LT TV4 261 is a newly created and improved laser transparent PBT. Its high transparency enables twice as fast laser welding cycle times while still ensuring high dimensional stability for safe and reliable parts (airtight, watertight). It has high design flexibility for molding thin-walled parts as well as thicker parts that require laser-welding, e.g. for rapidly bonding radomes and back covers.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	17	cm³/10min	ISO 1133
Temperature	275	°C	-
Load	2.16	kg	-
^[C] Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.4	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	10200	MPa	ISO 527
^[C] Stress at break	135	MPa	ISO 527
^[C] Strain at break	2.5	%	ISO 527
^[C] Charpy impact strength, +23°C	45	kJ/m²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	37	kJ/m²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	8.7	kJ/m²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	7.9	kJ/m²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	223	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	205	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	220	°C	ISO 75-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Electric strength	37	kV/mm	IEC 60243-1
^[C] Comparative tracking index	375	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1540	kg/m³	ISO 1183

[C]: CAMPUS

Characteristics

Delivery form

Black

Regional Availability

North America, Europe, Asia Pacific

Features

Laser Transparent, Laser Weldable

Other text information

Injection molding

[Injection Molding Recommendations](#)