Property Data

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Arnite® LT TV4 261

PBT–GF30

Laser Transparent Black, Laser Weldable

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.

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	**VALUE**		
Melt volume–flow rate	17	cm³/10min	ISO 1133
Temperature	275	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage (normal)	1.35	%	ISO 294–4
Molding shrinkage (parallel)	0.35	%	ISO 294–4
MECHANICAL PROPERTIES	**VALUE**		
Tensile modulus	10200	MPa	ISO 527–1/–2
Stress at break	135	MPa	ISO 527–1/–2
Strain at break	2.5	%	ISO 527–1/–2
Flexural modulus	9200	MPa	ISO 178
Flexural strength	220	MPa	ISO 178
Charpy impact strength (+23°C)	45	kJ/m²	ISO 179/1eU
Charpy impact strength (–30°C)	37	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	8.7	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	7.9	kJ/m²	ISO 179/1eA
THERMAL PROPERTIES	**VALUE**		
Melting temperature (10°C/min)	223	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	205	°C	ISO 75–1/–2

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Temp. of deflection under load (0.45 MPa)	220	°C	ISO 75-1/-2
Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	IEC 60695-11-10
Burning Behav. at 3.0 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	3	mm	IEC 60695-11-10

ELECTRICAL PROPERTIES	VALUE		
Electric strength	37	kV/mm	IEC 60243-1
Comparative tracking index	375	V	IEC 60112

OTHER PROPERTIES	VALUE		
Density	1540	kg/m³	ISO 1183