

Arnitel[®] EL550-08

TPC-ET

Food Contact Quality, Injection Molding

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	VALUE		
Melt volume-flow rate	23	cm ³ /10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage [parallel]	1.55	%	Sim. to ISO 294-4
Molding shrinkage [normal]	1.55	%	Sim. to ISO 294-4
MECHANICAL PROPERTIES	VALUE		
Shore D Hardness (3s)	54	—	ISO 868
Tensile modulus	210	MPa	ISO 527-1/-2
Stress at break	35	MPa	ISO 527-1/-2
Nominal strain at break	620	%	ISO 527-1/-2
Stress at 5% strain	8.8	MPa	ISO 527-1/-2
Stress at 10% strain	12.8	MPa	ISO 527-1/-2
Stress at 50% strain	14.6	MPa	ISO 527-1/-2
Stress at 100% strain	14.6	MPa	ISO 527-1/-2
Charpy notched impact strength (+23°C)	N	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	25	kJ/m ²	ISO 179/1eA
Izod notched impact strength (+23°C)	N	kJ/m ²	ISO 180/1A
Izod notched impact strength (-20°C)	N	kJ/m ²	ISO 180/1A
Flexural modulus	230	MPa	ISO 178
Compression Set under constant strain at 70 °C	40	%	ISO 815

Arnitel[®] EL550–08

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
MECHANICAL PROPERTIES (DIE CUTTING)	VALUE		
Stress at break (normal)	39	MPa	ISO 527–1/–2
Tear strength (normal)	153	kN/m	ISO 34–1; Method B
Tear strength (parallel)	152	kN/m	ISO 34–1; Method B
Strain at break (normal)	810	%	ISO 527–1/–2
THERMAL PROPERTIES	VALUE		
Melting temperature (10°C/min)	204	°C	ISO 11357–1/–3
Temp. of deflection under load (0.45 MPa)	110	°C	ISO 75–1/–2
Vicat softening temperature (50°C/h 50N)	90	°C	ISO 306
Coeff. of linear therm. expansion (parallel)	2	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	2	E–4/°C	ISO 11359–1/–2
ELECTRICAL PROPERTIES	VALUE		
Relative permittivity (100Hz)	4.4	–	IEC 62631–2–1
Relative permittivity (1 MHz)	4	–	IEC 62631–2–1
Dissipation factor (1 MHz)	400	E–4	IEC 62631–2–1
Volume resistivity	1E11	Ohm*m	IEC 62631–3–1
Electric strength	21	kV/mm	IEC 60243–1
Comparative tracking index	600	V	IEC 60112
OTHER PROPERTIES	VALUE		
Density	1200	kg/m³	ISO 1183
Water absorption	0.65	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62