

Product Texts

Injection Molding, Film Extrusion, Medical grade, Food Contact Quality

ISO 18064 TPC-ET

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	46	cm ³ /10min	ISO 1133
Temperature	230	°C	-
Load	2.16	kg	-
^[C] Density of melt	928	kg/m ³	-
^[C] Thermal conductivity of melt	0.1	W/(m K)	-
^[C] Spec. heat capacity of melt	1800	J/(kg K)	-
^[C] Eff. thermal diffusivity	5.99E-8	m ² /s	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	N	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	N	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	N	kJ/m ²	ISO 179/1eA
^[C] Tensile notched impact strength, +23°C	187	kJ/m ²	ISO 8256/1
^[C] Stress at 10% elongation	7	MPa	ISO 527
^[C] Stress at 100% elongation	9.2	MPa	ISO 527
^[C] Stress at 300% elongation	11.8	MPa	ISO 527
^[C] Stress at break TPE	23	MPa	ISO 527
^[C] Strain at break TPE	>300	%	ISO 527
^[C] Compression set at 70 °C, 24h	50	%	ISO 815

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	189	°C	ISO 11357-1/-3
^[C] Vicat softening temperature, B	50	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	160	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	160	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 1MHz	4.4	-	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	350	E-4	IEC 62631-2-1
^[C] Volume resistivity	1E11	Ohm*m	IEC 62631-3-1
^[C] Electric strength	20	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Water absorption	0.7	%	Sim. to ISO 62
^[C] Humidity absorption	0.3	%	Sim. to ISO 62
^[C] Density	1150	kg/m ³	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	100	°C	-
Pre-drying - Time	3 - 6	h	-
Melt temperature	220 - 240	°C	-
Mold temperature	20 - 50	°C	-
Zone 1	190 - 210	°C	-
Zone 2	200 - 220	°C	-
Zone 3	210 - 230	°C	-
Nozzle temperature	220 - 240	°C	-
Back pressure	3 - 10	MPa	-

Characteristics

Processing

Injection Molding, Film Extrusion

Applications

Medical

Delivery form

Pellets

Regional Availability

North America, Europe, Asia Pacific

Certifications

Food contact, Medical Grade

Other text information

Injection molding

- [Injection Molding Recommendations](#)
- [Steel recommendations for molds screws and barrels](#)
- [Trouble shooting guideline for injection molding](#)

Film extrusion

- [Arnitel® Recommendations for Extrusion](#)