LEXAN™ Copolymer 4504 - Europe

PC — Saudi Basic Industries Corporation (SABIC)

Product Texts

High heat resistant polycarbonate copolymer, provides DTUL of 290F at 264 psi. FDA food contact compliant in limited colors. Effective January 15th, 2008 this grade will no longer be supported with biocompatibility information and should not be used for medical applications which require biocompatibility. Alternative grade HPH4504.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**10**	cm³/10min	ISO 1133
Temperature	**300**	°C	-
Load	**5**	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2300**	MPa	ISO 527
Yield stress	**65**	MPa	ISO 527
Yield strain	**7**	%	ISO 527
Stress at break	**55**	MPa	ISO 527
Strain at break	**50**	%	ISO 527
Flexural modulus	**2300**	MPa	ISO 178
Charpy impact strength, +23°C, 3mm	**N**	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C, 3mm	**N**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C, 3mm	**59**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	**15**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C	**N**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 3mm	**54**	kJ/m²	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	**12**	kJ/m²	ISO 180/1A
Rockwell hardness	**R 122**	-	ISO 2039-2

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, 120°C/h 50N	**160**	°C	ISO 306
Thermal Conductivity	**0.21**	W/(m K)	DIN 52616

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	**3**	-	IEC 62631-2-1
Dissipation factor, 100Hz	**240**	E-4	IEC 62631-2-1

Other properties	Value	Unit	Test Standard
Density	**1200**	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**125 - 135**	°C	-
Pre-drying - Time	**3 - 4**	h	-
Melt temperature	**325 - 360**	°C	-
Mold temperature	**100 - 125**	°C	-
Feed temperature	**60 - 80**	°C	-
Zone 1	**300 - 320**	°C	-
Zone 2	**310 - 330**	°C	-
Zone 3	**320 - 340**	°C	-

Characteristics

Processing

Injection Molding

Regional Availability

Europe

Certifications

Food contact, Food approval FDA 21 CFR