

**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
<b>ISO Data</b>			
Melt volume-flow rate, MVR	3	cm <sup>3</sup> /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
<b>ASTM Data</b>			
Melt Flow Index, MFI	3	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2300	MPa	ISO 527
Yield stress	65	MPa	ISO 527
Yield strain	7	%	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	2300	MPa	ISO 178
Charpy notched impact strength, +23°C	15	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	13	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	11	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Tensile Modulus	2090	MPa	ASTM D 638
Tensile Strength at Yield	65	MPa	ASTM D 638
Tensile Strength at Break	71	MPa	ASTM D 638
Elongation at Yield	7	%	ASTM D 638
Elongation at Break	122	%	ASTM D 638
Flexural Modulus	2020	MPa	ASTM D 790
Rockwell Hardness	R 122	-	ASTM D 785
Izod Impact notched, 1/8 in	640	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	144	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	3200	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	132	°C	ISO 75-1/-2
Vicat softening temperature, B	154	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	160	°C	ISO 306
<b>ASTM Data</b>			
DTUL @ 264 psi	143	°C	ASTM D 648
Vicat Temperature	160	°C	ASTM D 1525
Thermal Conductivity, solid state	0.0303	W/(m K)	ASTM C 177
Specific Heat	1260	J/(kg K)	ASTM C 351

Electrical properties	Value	Unit	Test Standard
<b>ASTM Data</b>			
Dissipation Factor, 60 Hz	0.0012	-	ASTM D 150
Dielectric Constant, 60 Hz	3.15	-	ASTM D 150
Dielectric Constant, 1 MHz	3	-	ASTM D 150
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Water absorption	0.16	%	Sim. to ISO 62
Humidity absorption	0.35	%	Sim. to ISO 62

**LEXAN™ Copolymer 4504 - Americas**

PC

Saudi Basic Industries Corporation (SABIC)

Density	<b>1200</b>	kg/m <sup>3</sup>	ISO 1183
Density	<b>1200</b>	kg/m <sup>3</sup>	ASTM D 792

<b>Processing Recommendation Injection Molding</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Pre-drying - Temperature	<b>120</b>	°C	-
Pre-drying - Time	<b>3 - 4</b>	h	-
Processing humidity	<b>≤0.02</b>	%	-
Melt temperature	<b>340 - 360</b>	°C	-
Mold temperature	<b>80 - 115</b>	°C	-
Zone 1	<b>315 - 340</b>	°C	-
Zone 2	<b>325 - 350</b>	°C	-
Zone 3	<b>340 - 360</b>	°C	-
Screw speed	<b>40 - 70</b>	rpm	-
Back pressure	<b>0.3 - 0.7</b>	MPa	-

**Characteristics****Processing**

Injection Molding

**Regional Availability**

North America

**Certifications**

Food contact, Food approval FDA 21 CFR