

Product Texts

High heat resistant polycarbonate copolymer, provides DTUL of 300F 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 HPH4704.

UL Yellow Card Link [E121562-220885](https://www.ul.com/lexan-4704)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	2	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
ASTM Data			
Melt Flow Index, MFI	2	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2300	MPa	ISO 527
Yield stress	70	MPa	ISO 527
Yield strain	7	%	ISO 527
Stress at break	68	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	2300	MPa	ISO 178
Izod notched impact strength, +23°C, 4mm	7	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	6	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	2080	MPa	ASTM D 638
Tensile Strength at Yield	65	MPa	ASTM D 638
Tensile Strength at Break	77	MPa	ASTM D 638
Elongation at Yield	8	%	ASTM D 638
Elongation at Break	78	%	ASTM D 638
Flexural Modulus	2330	MPa	ASTM D 790
Rockwell Hardness	R 127	-	ASTM D 785
Izod Impact notched, 1/8 in	373	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	84	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
ISO Data			
Temp. of deflection under load, 1.80 MPa	150	°C	ISO 75-1/-2
Vicat softening temperature, B	165	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	167	°C	ISO 306
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
ASTM Data			
DTUL @ 264 psi	148	°C	ASTM D 648
Vicat Temperature	173	°C	ASTM D 1525
Thermal Conductivity, solid state	0.0303	W/(m K)	ASTM C 177
Specific Heat	1250	J/(kg K)	ASTM C 351

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Dissipation Factor, 60 Hz	0.0016	-	ASTM D 150
Dielectric Constant, 60 Hz	3.27	-	ASTM D 150
Dielectric Constant, 1 MHz	3.1	-	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
Density	1200	kg/m ³	ISO 1183
Density	1200	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	350 - 370	°C	-
Mold temperature	80 - 115	°C	-
Zone 1	325 - 350	°C	-
Zone 2	340 - 360	°C	-
Zone 3	350 - 370	°C	-
Screw speed	40 - 70	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Regional Availability

North America

Certifications

Food contact, Food approval FDA 21 CFR