

SABIC LEXAN™ HFR1724

High flow polycarbonate resin with mold release. FDA food contact compliant. Available in limited transparent tints, limited package types, and must meet minimum order quantity requirements.
Information provided by SABIC

Physical Properties	Metric	English	Comments
Specific Gravity	1.20 g/cc	1.20 g/cc	ASTM D792
Density	1.20 g/cc	0.0434 lb/in ³	ISO 1183
Linear Mold Shrinkage, Flow	0.0050 - 0.0070 cm/cm @Thickness 3.20 mm	0.0050 - 0.0070 in/in @Thickness 0.126 in	SABIC method
Melt Flow	25 g/10 min @Load 1.20 kg, Temperature 300 °C	25 g/10 min @Load 2.65 lb, Temperature 572 °F	ASTM D1238
	26 g/10 min @Load 1.20 kg, Temperature 300 °C	26 g/10 min @Load 2.65 lb, Temperature 572 °F	cm ³ /10 min; ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	50.0 MPa	7250 psi	50 mm/min; ISO 527
	65.0 MPa	9430 psi	50 mm/min; ASTM D638
Tensile Strength, Yield	62.0 MPa	8990 psi	50 mm/min; ASTM D638
	63.0 MPa	9140 psi	50 mm/min; ISO 527
Elongation at Break	70 %	70 %	50 mm/min; ISO 527
	120 %	120 %	50 mm/min; ASTM D638
Elongation at Yield	6.0 %	6.0 %	50 mm/min; ISO 527
	6.0 %	6.0 %	50 mm/min; ASTM D638
Tensile Modulus	2.35 GPa	341 ksi	1mm/min; ISO 527
	2.38 GPa	345 ksi	50 mm/min; ASTM D638
Flexural Yield Strength	90.0 MPa	13100 psi	2 mm/min; ISO 178
	93.0 MPa	13500 psi	1.3 mm/min, 50 mm span; ASTM D790
Flexural Modulus	2.30 GPa	334 ksi	1.3 mm/min, 50 mm span; ASTM D790
	2.30 GPa	334 ksi	2 mm/min; ISO 178
Izod Impact, Notched	6.40 J/cm	12.0 ft-lb/in	ASTM D256
Izod Impact, Notched (ISO)	12.0 kJ/m ²	5.71 ft-lb/in ²	80*10*4; ISO 180/1A

Thermal Properties	Metric	English	Comments
Deflection Temperature at 1.8 MPa (264 psi)	121 °C	250 °F	1.8 MPa Edgew 120*10*4 sp=100mm; ISO 75/Ae
	126 °C @Thickness 3.20 mm	259 °F @Thickness 0.126 in	unannealed; ASTM D648
Vicat Softening Point	140 °C	284 °F	Rate B/120; ISO 306

Processing Properties	Metric	English	Comments
Nozzle Temperature	265 - 290 °C	509 - 554 °F	Injection Molding
Zone 1	250 - 270 °C	482 - 518 °F	
Zone 2	260 - 280 °C	500 - 536 °F	
Zone 3	270 - 295 °C	518 - 563 °F	
Melt Temperature	270 - 295 °C	518 - 563 °F	
Mold Temperature	70.0 - 95.0 °C	158 - 203 °F	
Drying Temperature	120 °C	248 °F	Injection Molding
Dry Time	3.00 - 4.00 hour	3.00 - 4.00 hour	Injection Molding
	48.0 hour	48.0 hour	Cumulative; Injection Molding
Moisture Content	0.020 %	0.020 %	
Back Pressure	0.300 - 0.700 MPa	43.5 - 102 psi	
Shot Size	40 - 60 %	40 - 60 %	
Vent Depth	0.00250 - 0.00760 cm	0.000984 - 0.00299 in	
Screw Speed	40 - 70 rpm	40 - 70 rpm	