

LEXAN™ COPOLYMER 4795R

REGION AMERICAS

DESCRIPTION

LEXAN 4795R is a high heat resistant poly(ester)carbonate injection molding resin. Flame Retardant.

TYPICAL PROPERTY VALUES

Revision 20230720

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yld, Type I, 50 mm/min	68	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	70	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	7.5	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	117	%	ASTM D638
Tensile Modulus, 50 mm/min	2170	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	105	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2200	MPa	ASTM D790
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	2140	J/m	ASTM D4812
Izod Impact, notched, 23°C	578	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	73	J	ASTM D3763
Instrumented Dart Impact Total Energy, 23°C	77	J	ASTM D3763
THERMAL ⁽¹⁾			
Vicat Softening Temp, Rate B/50	164	°C	ASTM D1525
HDT, 0.45 MPa, 3.2 mm, unannealed	160	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	147	°C	ASTM D648
Ball Pressure Test, 125°C +/- 2°C	PASS	-	IEC 60695-10-2
PHYSICAL ⁽¹⁾			
Specific Gravity	1.2	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm ⁽²⁾	0.97	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm ⁽²⁾	0.97	%	SABIC method
Melt Flow Rate, 330°C/2.16 kgf	15	g/10 min	ASTM D1238
Melt Flow Rate, 300°C/1.2 kgf	2.5	g/10 min	ASTM D1238
Density	1.2	g/cm ³	ISO 1183
INJECTION MOLDING ⁽³⁾			
Drying Temperature	120	°C	
Drying Time	3 – 4	Hrs	
Drying Time (Cumulative)	48	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	350 – 370	°C	
Nozzle Temperature	345 – 365	°C	
Front - Zone 3 Temperature	350 – 370	°C	
Middle - Zone 2 Temperature	340 – 360	°C	
Rear - Zone 1 Temperature	325 – 350	°C	
Mold Temperature	80 – 115	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	40 – 70	rpm	
Shot to Cylinder Size	40 – 60	%	
Vent Depth	0.025 – 0.076	mm	

- (1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
- (2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article. The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
- (3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

MORE INFORMATION

For curve data and CAE cards, please visit and register at <https://materialfinder.sabic-specialties.com>

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