

LEXANT™ RESIN 121M

REGION AMERICAS

DESCRIPTION

LEXANT™ 121M resin is a 18 MFR polycarbonate. Improved internal mold release, UL94 HB rated.

TYPICAL PROPERTY VALUES

Revision 20201125

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	63	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	66	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	7	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	120	%	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	100	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2350	MPa	ASTM D790
IMPACT			
Izod Impact, unnotched, 23°C	2140	J/m	ASTM D4812
Izod Impact, notched, 23°C	820	J/m	ASTM D256
Izod Impact, notched, -30°C	200	J/m	ASTM D256
Falling Dart Impact (D 3029), 23°C	169	J	ASTM D3029
Instrumented Dart Impact Total Energy, 23°C	77	J	ASTM D3763
THERMAL			
Vicat Softening Temp, Rate B/50	143	°C	ASTM D1525
HDT, 0.45 MPa, 3.2 mm, unannealed	137	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	132	°C	ASTM D648
CTE, -40°C to 40°C, flow	6.36E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	6.5E-05	1/°C	ASTM E831
Specific Heat	1.26	J/g-°C	ASTM C351
Thermal Conductivity	0.19	W/m-°C	ASTM C177
PHYSICAL			
Specific Gravity	1.2	-	ASTM D792
Specific Volume	0.83	cm³/g	ASTM D792
Density	1.19	g/cm³	ASTM D792
Water Absorption, (23°C/24hrs)	0.15	%	ASTM D570
Water Absorption, (23°C/Saturated)	0.35	%	ASTM D570
Water Absorption, equilibrium, 100°C	0.58	%	ASTM D570
Mold Shrinkage, flow, 3.2 mm	0.5 – 0.8	%	SABIC method
Melt Flow Rate, 300°C/1.2 kgf	17.5	g/10 min	ASTM D1238
OPTICAL			
Light Transmission, 2.54 mm	88	%	ASTM D1003
Haze, 2.54 mm	1	%	ASTM D1003
Refractive Index	1.586	-	ASTM D542
INJECTION MOLDING			
Drying Temperature	120	°C	

© 2024 Copyright by SABIC. All rights reserved

CHEMISTRY THAT MATTERS™



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Time	3 – 4	Hrs	
Drying Time (Cumulative)	48	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	280 – 305	°C	
Nozzle Temperature	275 – 300	°C	
Front - Zone 3 Temperature	280 – 305	°C	
Middle - Zone 2 Temperature	270 – 295	°C	
Rear - Zone 1 Temperature	260 – 280	°C	
Mold Temperature	70 – 95	°C	
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	

DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.

