

LEXANT™ FR RESINS 949U

REGION EUROPE

DESCRIPTION

LEXANT™ 949U resin is a 10 MFR polycarbonate. UV stabilized. Mold release. Non-chlorinated, non-brominated and No PFAS intentionally added flame retardant, UL94 V0 rated. It is an excellent candidate for Electrical and Electronic applications. Available in opaque colors.

TYPICAL PROPERTY VALUES

Revision 20260423

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield, 50 mm/min ⁽¹⁾	57	MPa	ISO 527
Tensile Stress, break, 50 mm/min ⁽²⁾	50	MPa	ISO 527
Tensile Strain, yield, 50 mm/min ⁽¹⁾	5	%	ISO 527
Tensile Strain, break, 50 mm/min	76	%	ISO 527
Tensile Modulus, 1 mm/min	2700	MPa	ISO 527
Flexural Modulus, 2 mm/min	2650	MPa	ISO 178
Flexural Stress, yield, 2 mm/min ⁽¹⁾	92	MPa	ISO 178
Tensile Modulus, 50 mm/min	2550	MPa	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	60	%	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min ⁽¹⁾	5	%	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min ⁽²⁾	52	MPa	ASTM D638
Tensile Stress, yld, Type I, 50 mm/min ⁽¹⁾	59	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	2550	MPa	ASTM D790
Flexural Stress, yld, 1.3 mm/min, 50 mm span ⁽¹⁾	94	MPa	ASTM D790
Flexural Stress, brk, 1.3 mm/min, 50 mm span ⁽²⁾	92	MPa	ASTM D790
IMPACT			
Izod Impact, notched 80°10°3 +23°C	70	kJ/m²	ISO 180/1A
Izod Impact, notched 80°10°4 +23°C	60	kJ/m²	ISO 180/1A
Izod Impact, notched 80°10°4 -30°C	15	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80°10°3 +23°C	NB	kJ/m²	ISO 180/1U
Izod Impact, unnotched 80°10°3 -30°C	NB	kJ/m²	ISO 180/1U
Izod Impact, unnotched 80°10°4 +23°C	NB	kJ/m²	ISO 180/1U
Izod Impact, unnotched 80°10°4 -30°C	NB	kJ/m²	ISO 180/1U
Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mm	NB	kJ/m²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm	NB	kJ/m²	ISO 179/1eU
Charpy 23°C, Unnotch Edgew 80°10°4 sp=62mm	NB	kJ/m²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80°10°4 sp=62mm	NB	kJ/m²	ISO 179/1eU
Charpy 23°C, V-notch Edgew 80°10°4 sp=62mm	60	kJ/m²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80°10°4 sp=62mm	12	kJ/m²	ISO 179/1eA
Izod Impact, notched, 23°C	800	J/m	ASTM D256
Izod Impact, notched, -30°C	130	J/m	ASTM D256
THERMAL			
Vicat Softening Temp, Rate B/50	139	°C	ISO 306
Vicat Softening Temp, Rate B/120	140	°C	ISO 306

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	121	°C	ISO 75 /Af
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	132	°C	ISO 75 /Bf
Ball Pressure Test, 125°C +/- 2°C	PASS	-	IEC 60695-10-2
Vicat Softening Temp, Rate B/50	141	°C	ASTM D1525
Vicat Softening Temp, Rate B/120	143	°C	ASTM D1525
HDT, 0.45 MPa, 3.2 mm, unannealed	131	°C	ASTM D648
HDT, 0.45 MPa, 6.4 mm, unannealed	132	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	119	°C	ASTM D648
HDT, 1.82 MPa, 6.4 mm, unannealed	122	°C	ASTM D648
CTE, -40°C to 40°C, flow	5.80E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	6.50E-05	1/°C	ASTM E831
PHYSICAL			
Specific Gravity	1.2	-	ASTM D792
Water Absorption, (23°C/24hrs)	0.15	%	ASTM D570
Melt Flow Rate, 300°C/1.2 kgf	10	g/10 min	ASTM D1238
FLAME CHARACTERISTICS			
UL Yellow Card Link	E207780	-	-
UL Recognized, 94V-2 Flame Class Rating	0.75	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating	1.5	mm	UL 94
Glow Wire Flammability Index 960°C, passes at	0.75	mm	IEC 60695-2-12
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	2 – 4	Hrs	
Drying Time (Cumulative)	48	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	275 – 315	°C	
Nozzle Temperature	270 – 310	°C	
Front - Zone 3 Temperature	275 – 315	°C	
Middle - Zone 2 Temperature	260 – 305	°C	
Rear - Zone 1 Temperature	260 – 295	°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	

(1) If applicable
(2) If no yield

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