



Lexan* Resin ML3400

Europe-Africa-Middle East: COMMERCIAL

LEXAN ML3400 is a medium viscosity, impact modified grade with improved chemical resistance. It passes the British Standard 2495 and 5361 solvent tests.

Property

TYPICAL PROPERTIES (1)				
MECHANICAL	Value	Unit	Standard	
Taber Abrasion, CS-17, 1 kg	10	mg/1000cy	SABIC Method	
Tensile Stress, yield, 50 mm/min	55	MPa	ISO 527	
Tensile Stress, break, 50 mm/min	57	MPa	ISO 527	
Tensile Strain, yield, 50 mm/min	6	%	ISO 527	
Tensile Strain, break, 50 mm/min	100	%	ISO 527	
Tensile Modulus, 1 mm/min	2100	MPa	ISO 527	
Flexural Stress, yield, 2 mm/min	80	MPa	ISO 178	
Flexural Modulus, 2 mm/min	2150	MPa	ISO 178	
Hardness, H358/30	85	MPa	ISO 2039-1	
IMPACT	Value	Unit	Standard	
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, notched 80*10*3 +23°C	60	kJ/m²	ISO 180/1A	
Izod Impact, notched 80*10*3 -30°C	55	kJ/m²	ISO 180/1A	
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	60	kJ/m²	ISO 179/1eA	
Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	55	kJ/m²	ISO 179/1eA	
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 Impact, notched, 23°C	40	kJ/m²	ISO 179/2C	
THERMAL	Value	Unit	Standard	
Thermal Conductivity	0.2	W/m-°C	ISO 8302	
CTE, 23°C to 80°C, flow	7.E-05	1/°C	ISO 11359-2	
Ball Pressure Test, 125°C +/- 2°C	PASSES	-	IEC 60695-10-2	
Vicat Softening Temp, Rate B/50	140	°C	ISO 306	
Vicat Softening Temp, Rate B/120	142	°C	ISO 306	
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	133	°C	ISO 75/Be	
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	121	°C	ISO 75/Ae	
PHYSICAL	Value	Unit	Standard	
Mold Shrinkage on Tensile Bar, flow (2)	0.6 - 0.8	%	SABIC Method	
Density	1.2	g/cm³	ISO 1183	
Water Absorption, (23°C/sat)	0.35	%	ISO 62	
Moisture Absorption (23°C / 50% RH)	0.15	%	ISO 62	
Melt Volume Rate, MVR at 300°C/1.2 kg	8	cm³/10 min	ISO 1133	
OPTICAL	Value	Unit	Standard	
Haze	NA	%	ASTM D 1003	
Refractive Index	NA	-	ISO 489	
ELECTRICAL	Value	Unit	Standard	
Volume Resistivity	>1.E+15	Ohm-cm	IEC 60093	

Surface Resistivity, ROA	>1.E+15	Ohm	IEC 60093
Dielectric Strength, in oil, 3.2 mm	17	kV/mm	IEC 60243-1
Relative Permittivity, 50/60 Hz	2.7	-	IEC 60250
Relative Permittivity, 1 MHz	2.7	-	IEC 60250
Dissipation Factor, 50/60 Hz	0.001	-	IEC 60250
Dissipation Factor, 1 MHz	0.01	-	IEC 60250
FLAME CHARACTERISTICS	Value	Unit	Standard
UL Compliant, 94V-2 Flame Class Rating (3)(4)	1.6	mm	UL 94 by GE
Glow Wire Flammability Index 850°C, passes at	1	mm	IEC 60695-2-12
Oxygen Index (LOI)	25	%	ISO 4589

Source GMD, last updated:07/31/1997

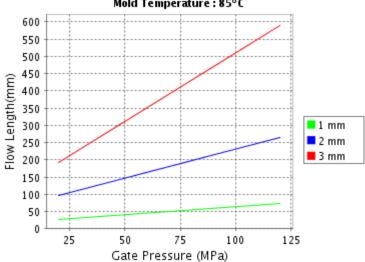
Processing

Parameter		
Injection Molding	Value	Unit
Drying Temperature	120	°C
Drying Time	2 - 4	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	280 - 310	°C
Nozzle Temperature	270 - 290	°C
Front - Zone 3 Temperature	280 - 310	°C
Middle - Zone 2 Temperature	270 - 290	°C
Rear - Zone 1 Temperature	260 - 280	°C
Hopper Temperature	60 - 80	°C
Mold Temperature	80 - 110	°C

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CALCULATED FLOW LENGTH INDICATION Moldflow® Radial Flow Analysis Lexan^ FXE1810T

Melt Temperature : 305°C Mold Temperature : 85°C



Note: Technical support is recommended if Gate Pressure is greater than 80 MPa. Contact your local representative.

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THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours

storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

- (2) Only typical data for selection purposes. Not to be used for part or tool design.
- (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
- (4) Internal measurements according to UL standards.

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