



LEXAN® 500
Americas: COMMERCIAL

10% GR PC. Optimum combination of high modulus plus excellent impact strength and flame retardance.

Table with 4 columns: TYPICAL PROPERTIES 1, TYPICAL VALUE, UNIT, STANDARD. Rows include MECHANICAL (Tensile Stress, Strain, Flexural Stress, Modulus, Hardness, Taber Abrasion), IMPACT (Izod, Tensile, Falling Dart), THERMAL (Vicat, HDT, CTE, Specific Heat, Thermal Conductivity, Relative Temp Index), and PHYSICAL (Specific Gravity, Volume, Density, Water Absorption, Mold Shrinkage).

1) Typical values only. Variations within normal tolerances are possible for various colours. All values are measured at least after 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume rate are measured on injection moulded samples. All samples are prepared according to ISO 294.

2) Only typical data for material selection purpose. 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) Own measurement according to UL.

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TYPICAL PROPERTIES ¹	TYPICAL VALUE	UNIT	STANDARD
Melt Flow Rate, 300°C/1.2 kgf	7.5	g/10 min	ASTM D 1238
ELECTRICAL			
Volume Resistivity	>1.E+17	Ohm-cm	ASTM D 257
Dielectric Strength, in air, 3.2 mm	17.7	kV/mm	ASTM D 149
Relative Permittivity, 50/60 Hz	3.1	-	ASTM D 150
Relative Permittivity, 1 MHz	3.05	-	ASTM D 150
Dissipation Factor, 50/60 Hz	0.0008	-	ASTM D 150
Dissipation Factor, 1 MHz	0.0075	-	ASTM D 150
Arc Resistance, Tungsten {PLC}	7	PLC Code	ASTM D 495
Hot Wire Ignition {PLC}	1	PLC Code	UL 746A
High Voltage Arc Track Rate {PLC}	4	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	4	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	3	PLC Code	UL 746A
FLAME CHARACTERISTICS			
UL Recognized, 94V-0 Flame Class Rating (3)	1.5	mm	UL 94
UL Recognized, 94-5VA Rating (3)	3	mm	UL 94
CSA (See File for complete listing)	LS88480	File No.	CSA LISTED
Oxygen Index (LOI)	36	%	ASTM D 2863
Radiant Panel Listing	YES	-	UL Tested
UV-light, water exposure/immersion	F2	-	UL 746C

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PROCESSING PARAMETERS	TYPICAL VALUE	UNIT
Injection Molding		
Drying Temperature	120	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	48	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	310 - 330	°C
Nozzle Temperature	305 - 325	°C
Front - Zone 3 Temperature	310 - 330	°C
Middle - Zone 2 Temperature	300 - 320	°C
Rear - Zone 1 Temperature	290 - 310	°C
Mold Temperature	80 - 115	°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

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