



LEXAN™ Resin LUX1814N

Americas: COMMERCIAL

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	630	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	610	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	7	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	91	%	ASTM D 638
Tensile Modulus, 50 mm/min	23400	kgf/cm ²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	990	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	24100	kgf/cm ²	ASTM D 790
IMPACT			
Izod Impact, notched, 23°C	84	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -30°C	11	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	734	cm-kgf	ASTM D 3763
THERMAL			
Vicat Softening Temp, Rate B/50	145	°C	ASTM D 1525
HDT, 0.45 MPa, 6.4 mm, unannealed	141	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	127	°C	ASTM D 648
CTE, -40°C to 40°C, flow	6.6E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.7E-05	1/°C	ASTM E 831
PHYSICAL			
Specific Gravity	1.2	-	ASTM D 792
Density	1.2	g/cm ³	ASTM D 792
Mold Shrinkage, flow, 3.2 mm (5)	0.6 - 0.9	%	SABIC Method
Melt Flow Rate, 300°C/1.2 kgf	3.2	g/10 min	ASTM D 1238



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Extrusion		
Drying Temperature	75 - 90	°C
Drying Time	2 - 4	hrs
Minimum Moisture Content	0.04	%
Melt Temperature	180 - 200	°C
Barrel - Zone 1 Temperature	165	°C
Barrel - Zone 2 Temperature	170	°C
Barrel - Zone 3 Temperature	175	°C
Barrel - Zone 4 Temperature	180	°C
Roll Stack Temperature - Top	175 - 180	°C
Roll Stack Temperature - Middle	175 - 180	°C
Roll Stack Temperature - Bottom	175 - 180	°C