



LEXAN™ RESIN EM1210

REGION AMERICAS

DESCRIPTION

Automotive interiors. Excellent heat/impact resistance and outstanding property retention over wide temperature range/severe automotive conditions

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	57	MPa	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	110	%	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	81	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2030	MPa	ASTM D 790
IMPACT			
Izod Impact, notched, 23°C	774	J/m	ASTM D 256
Izod Impact, notched, -30°C	694	J/m	ASTM D 256
Izod Impact, notched, 23°C, 6.4mm	694	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	61	J	ASTM D 3763
Instrumented Impact Energy @ peak, -30	65	J	ASTM D 3763
THERMAL			
HDT, 0.45 MPa, 6.4 mm, unannealed	135	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	127	°C	ASTM D 648
CTE, -40°C to 95°C, flow	6.48E-05	1/°C	ASTM E 831
PHYSICAL			
Specific Gravity	1.19	-	ASTM D 792
Water Absorption, 24 hours	0.16	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm (5)	0.5 – 0.7	%	SABIC method
Melt Flow Rate, 300°C/1.2 kgf	13	g/10 min	ASTM D 1238
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	3 – 4	hrs	
Drying Time (Cumulative)	48	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	295 – 315	°C	
Nozzle Temperature	290 – 310	°C	



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Front - Zone 3 Temperature	295 – 315	°C	
Middle - Zone 2 Temperature	280 – 305	°C	
Rear - Zone 1 Temperature	270 – 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	