



LEXAN™ Resin BM5225X

Asia Pacific: COMMERCIAL

BM5225X resin is a mineral filled grade featuring of high modulus, good flow and ductility, low warpage. It is of non-Br & non-Cl flame retardant systems intended to meet thin wall flame resistance and various environmental requirements.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	560	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	340	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	3	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	15	%	ASTM D 638
Tensile Modulus, 5 mm/min	59600	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	61300	kgf/cm ²	ASTM D 790
Hardness, Rockwell R	109	-	ASTM D 785
Tensile Stress, yield, 5 mm/min	56	MPa	ISO 527
Tensile Stress, break, 5 mm/min	30	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3	%	ISO 527
Tensile Strain, break, 5 mm/min	6	%	ISO 527
Tensile Modulus, 1 mm/min	5570	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	98	MPa	ISO 178
Flexural Modulus, 2 mm/min	6150	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	9	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -30°C	5	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	295	cm-kgf	ASTM D 3763
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	7	kJ/m ²	ISO 179/1eA
THERMAL			
Vicat Softening Temp, Rate B/50	98	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	92	°C	ASTM D 648



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	85	°C	ASTM D 648
CTE, 23°C to 80°C, flow	3.4E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	7.2E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	87	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.39	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm (5)	0.2 - 0.3	%	SABIC Method
Melt Flow Rate, 260°C/2.16 kgf	12	g/10 min	ASTM D 1238
Density	1.4	g/cm ³	ISO 1183
FLAME CHARACTERISTICS			
UL Recognized, 94V-1 Flame Class Rating (3)	0.8	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating (3)	1.5	mm	UL 94
UL Recognized, 94-5VB Rating (3)	1.5	mm	UL 94



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	90 - 105	°C
Drying Time	4 - 6	hrs
Drying Time (Cumulative)	16	hrs
Melt Temperature	270 - 300	°C
Nozzle Temperature	280 - 300	°C
Front - Zone 3 Temperature	270 - 290	°C
Middle - Zone 2 Temperature	260 - 280	°C
Rear - Zone 1 Temperature	250 - 270	°C
Mold Temperature	70 - 90	°C