



Lexan* Resin DMX9254

Asia Pacific: COMMERCIAL

Lexan* DMX9254 resin is an injection moldable PC copolymer/ABS blend. This resin combines excellent scratch resistance with high flow and ductility. It contains non-brominated and non-chlorinated flame retardant systems to meet UL-94 V0 at 1.5mm and V1 at 1.0mm.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	UNIT	STANDARD
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	730	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	560	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	4.8	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	65	%	ASTM D 638
Tensile Modulus, 50 mm/min	32100	kgf/cm ²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	1110	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	28000	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 50 mm/min	3050	MPa	ISO 527
Tensile Stress, break, 50 mm/min	53	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	4.7	%	ISO 527
Tensile Strain, break, 50 mm/min	75	%	ISO 527
Tensile Modulus, 1 mm/min	2850	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	105	MPa	ISO 178
Flexural Modulus, 2 mm/min	2700	MPa	ISO 178
Pencil Hardness test, 1kgf	F	-	ASTM D 3363
IMPACT			
Izod Impact, notched, 23°C	4	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -30°C	2	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	571	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*3 +23°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, unnotched 80*10*3 -30°C	53	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*3 +23°C	6	kJ/m ²	ISO 180/1A



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	UNIT	STANDARD
IMPACT			
Izod Impact, notched 80*10*3 -30°C	5	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	7	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	5	kJ/m ²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm	NB	kJ/m ²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm	59	kJ/m ²	ISO 179/1eU
THERMAL			
Vicat Softening Temp, Rate B/50	105	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	98	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	87	°C	ASTM D 648
CTE, -40°C to 40°C, flow	6.E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	6.E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	104	°C	ISO 306
Vicat Softening Temp, Rate B/120	107	°C	ISO 306
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	98	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	88	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.19	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.5 - 0.7	%	SABIC Method
Melt Flow Rate, 260°C/2.16 kgf	15	g/10 min	ASTM D 1238
Melt Flow Rate, 300°C/1.2 kgf	29	g/10 min	ASTM D 1238
Density	1.19	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	0.1	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.1	%	ISO 62



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	UNIT	STANDARD
PHYSICAL			
Melt Volume Rate, MVR at 260°C/2.16 kg	12	cm³/10 min	ISO 1133
Melt Volume Rate, MVR at 300°C/1.2 kg	25	cm³/10 min	ISO 1133
FLAME CHARACTERISTICS			
UL Recognized, 94V-1 Flame Class Rating (3)	1	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating (3)	1.5	mm	UL 94



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PROCESSING PARAMETERS	TYPICAL VALUE	UNIT
Injection Molding		
Drying Temperature	80 - 90	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.04	%
Melt Temperature	245 - 275	°C
Nozzle Temperature	245 - 275	°C
Front - Zone 3 Temperature	245 - 275	°C
Middle - Zone 2 Temperature	220 - 265	°C
Rear - Zone 1 Temperature	220 - 255	°C
Mold Temperature	60 - 80	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	40 - 70	rpm
Shot to Cylinder Size	30 - 80	%
Vent Depth	0.038 - 0.076	mm