

## Lexan\* Resin 123HSR

## Asia Pacific: COMMERCIAL

Easy flow, UV stabilised, super release grade polycarbonate.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
	Value	Unit	Standard
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 50 mm/min	65	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	66	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	6	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	143	%	ASTM D 638
Tensile Modulus, 50 mm/min	2340	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	97	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2300	MPa	ASTM D 790
<b>IMPACT</b>			
Izod Impact, notched, 23°C	801	J/m	ASTM D 256
<b>THERMAL</b>			
Vicat Softening Temp, Rate B/50	141	°C	ASTM D 1525
HDT, 1.82 MPa, 3.2mm, unannealed	123	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	133	°C	ASTM D 648
CTE, -40°C to 60°C, flow	1.26E-04	1/°C	ASTM E 831
Relative Temp Index, Elec	130	°C	UL 746B
Relative Temp Index, Mech w/impact	125	°C	UL 746B
Relative Temp Index, Mech w/o impact	125	°C	UL 746B
<b>PHYSICAL</b>			
Specific Gravity	1.2	-	ASTM D 792
Water Absorption, 24 hours	0.15	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm	0.5 - 0.7	%	SABIC Method
Melt Flow Rate, 300°C/1.2 kgf	18	g/10 min	ASTM D 1238
<b>ELECTRICAL</b>			
Volume Resistivity	1.E+15	Ohm-cm	ASTM D 257
Surface Resistivity	1.E+15	Ohm	ASTM D 257
Relative Permittivity, 50/60 Hz	0	-	ASTM D 150
Relative Permittivity, 1 MHz	0.01	-	ASTM D 150
Dissipation Factor, 50/60 Hz	2.7	-	ASTM D 150
Dissipation Factor, 1 MHz	2.7	-	ASTM D 150
Comparative Tracking Index	250	V	IEC 60112
<b>FLAME CHARACTERISTICS</b>			
UL Recognized, 94HB Flame Class Rating (3)	1.5	mm	UL 94

Source GMD, last updated:06/18/1999

### Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	120	°C
Drying Time	3 - 4	hrs

Drying Time (Cumulative)	48	hrs
Melt Temperature	280 - 305	°C
Mold Temperature	70 - 95	°C

Source GMD, last updated:06/18/1999

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. 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) Internal measurements according to UL standards.

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