

# LEXANT™ RESIN HF1 140R

REGION ASIA

## DESCRIPTION

LEXANT™ HF1 140R resin is a 25 MFR polycarbonate, MVR of 26. Grade designed for food contact. Mold release. UL94 V2 rated. (For FDA, European food contact regulation, Japan, China and other agencies declarations worldwide, including any applied restrictions, contact your local SABIC representative).

## TYPICAL PROPERTY VALUES

Revision 20201125

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 50 mm/min	62	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	65	MPa	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	120	%	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	93	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2300	MPa	ASTM D790
<b>IMPACT</b>			
Izod Impact, notched, 23°C	640	J/m	ASTM D256
Tensile Impact Strength, Type S	378	kJ/m²	ASTM D1822
Instrumented Dart Impact Energy @ peak, 23°C	54	J	ASTM D3763
<b>THERMAL</b>			
HDT, 1.82 MPa, 3.2mm, unannealed	126	°C	ASTM D648
Relative Temp Index, Elec	130	°C	UL 746B
Relative Temp Index, Mech w/impact	130	°C	UL 746B
Relative Temp Index, Mech w/o impact	130	°C	UL 746B
<b>PHYSICAL</b>			
Specific Gravity	1.2	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm	0.5 – 0.7	%	SABIC method
Melt Flow Rate, 300°C/1.2 kgf	25	g/10 min	ASTM D1238
<b>OPTICAL</b>			
Light Transmission, 2.54 mm	88	%	ASTM D1003
Haze, 2.54 mm	1	%	ASTM D1003
<b>ELECTRICAL</b>			
Hot Wire Ignition {PLC}	2	PLC Code	UL 746A
High Voltage Arc Track Rate {PLC}	2	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	1	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	2	PLC Code	UL 746A
<b>FLAME CHARACTERISTICS</b>			
UL Recognized, 94V-2 Flame Class Rating	1.09	mm	UL 94
<b>INJECTION MOLDING</b>			
Drying Temperature	120	°C	
Drying Time	3 – 4	Hrs	
Drying Time (Cumulative)	48	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	270 – 295	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Nozzle Temperature	265 – 290	°C	
Front - Zone 3 Temperature	270 – 295	°C	
Middle - Zone 2 Temperature	260 – 280	°C	
Rear - Zone 1 Temperature	250 – 270	°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	

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