

Lexan* Resin FL3000

Americas: COMMERCIAL

Structural foam: 10% weight reduction at 0.250" wall with non-brominated and non-chlorinated FR systems. Impact modified PC with excellent low-temperature impact and UV-stability.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
FOAM - MECHANICAL 6.4 mm Wt Reduction	10	%	-
Tensile Stress, break, 6.35 mm	40	MPa	ASTM D 638
Tensile Strain, break, 6.35 mm	3.2	%	ASTM D 638
Tensile Modulus, 6.4 mm	2810	MPa	ASTM D 638
Flexural Stress, yield, 6.4 mm	72	MPa	ASTM D 790
Flexural Modulus, 6.4 mm	1890	MPa	ASTM D 790
IMPACT	Value	Unit	Standard
FOAM - IMPACT 6.4 mm Wt Reduction	10	%	-
Izod Impact, unnotched, 23°C, 6.4mm	907	J/m	ASTM D 4812
Instrumented Impact Total Energy, 23°C	89	J	ASTM D 3763
Instrumented Impact Total Energy, -20°C	94	J	ASTM D 3763
Instrumented Impact Total Energy, -40°C	94	J	ASTM D 3673
THERMAL	Value	Unit	Standard
FOAM - THERMAL 6.4mm Wt Reduction	10	%	-
HDT, 0.45 MPa, 6.4 mm, unannealed	131	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	120	°C	ASTM D 648
Relative Temp Index, Elec	50	°C	UL 746B
Relative Temp Index, Mech w/impact	50	°C	UL 746B
Relative Temp Index, Mech w/o impact	50	°C	UL 746B
PHYSICAL	Value	Unit	Standard
FOAM - PHYSICAL 6.4mm Wt Reduction	10	%	-
Specific Gravity	1.19	-	ASTM D 792
Specific Gravity, foam molded	1.07	-	ASTM D 792
Mold Shrinkage, flow, 6.4 mm	0.4 - 0.8	%	SABIC Method
Melt Flow Rate, 300°C/1.2 kgf	9.5	g/10 min	ASTM D 1238
FLAME CHARACTERISTICS	Value	Unit	Standard
FOAM - Flame Class Minimum Density	1.07	g/cm ³	-
UL Recognized, 94V-0 Flame Class Rating (3)	2.99	mm	UL 94
UL Recognized, 94-5VA Rating (3)	6.09	mm	UL 94
UV-light, water exposure/immersion	F1	-	UL 746C

Source GMD, last updated:05/18/1999

Processing

Parameter	Value	Unit
Structural Foam Molding		
Blowing Agent, Physical System	Nitrogen Gas	-
Blowing Agent, Chemical System	FLC95	-
Drying Time (Blowing Agent)	4	hrs

Drying Temperature (Blowing Agent)	105	°C
Concentration Range (Blowing Agent)	4 - 8	%
Recommended Concentration (Blowing Agent)	6	%
Drying Temperature (Resin)	120	°C
Drying Time (Resin)	3 - 4	hrs
Drying Time (Resin, Cumulative)	48	hrs
Melt Temperature	295 - 315	°C
Nozzle Temperature	290 - 310	°C
Front Temperature	295 - 315	°C
Middle Temperature	280 - 305	°C
Rear Temperature	270 - 295	°C
Mold Temperature	70 - 95	°C

Source GMD, last updated:05/18/1999

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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