



# Lexan\* Resin LGK3020

Asia Pacific: COMMERCIAL

Glass reinforced. Flame retardant.

### **Property**

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, brk, Type I, 50 mm/min	117	MPa	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	4	%	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	147	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	6570	MPa	ASTM D 790
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	122	J/m	ASTM D 256
THERMAL	Value	Unit	Standard
HDT, 1.82 MPa, 6.4 mm, unannealed	146	°C	ASTM D 648
CTE, -30°C to 30°C, flow	2.7E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	4.68E-05	1/°C	ASTM D 696
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.43	-	ASTM D 792
Water Absorption, 24 hours	0.13	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm	0.05 - 0.25	%	SABIC Method
Mold Shrinkage, xflow, 3.2 mm	0.15 - 0.35	%	SABIC Method
ELECTRICAL	Value	Unit	Standard
Dielectric Strength, in oil, 3.2 mm	17.7	kV/mm	ASTM D 149
FLAME CHARACTERISTICS	Value	Unit	Standard
UL Recognized, 94V-0 Flame Class Rating (3)	1.6	mm	UL 94

Source GMD, last updated:01/04/2000

## **Processing**

Parameter		
Injection Molding	Value	Unit
Drying Temperature	120	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	48	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	315 - 340	°C
Nozzle Temperature	310 - 330	°C
Front - Zone 3 Temperature	315 - 340	°C
Middle - Zone 2 Temperature	305 - 325	°C
Rear - Zone 1 Temperature	295 - 315	°C
Mold Temperature	80 - 115	°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

Source GMD, last updated:01/04/2000

### 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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