

Lexan* Resin OQ3220

Americas: COMMERCIAL

Medium-high flow. UV-stabilized. For ophthalmic lenses. In natural and selected colors.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 50 mm/min	62	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	68	MPa	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	125	%	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	96	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2340	MPa	ASTM D 790
Purity, particles per gram > 50 microns	1	-	SABIC Method
Purity, particles per gram 20-50 microns	40	-	SABIC Method
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	694	J/m	ASTM D 256
Tensile Impact, Type "S"	472	kJ/m ²	ASTM D 1822
Instrumented Impact Energy @ peak, 23°C	62	J	ASTM D 3763
THERMAL	Value	Unit	Standard
HDT, 1.82 MPa, 6.4 mm, unannealed	129	°C	ASTM D 648
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.2	-	ASTM D 792
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
OPTICAL	Value	Unit	Standard
Light Transmission	89	%	ASTM D 1003
Haze	0.6	%	ASTM D 1003
Refractive Index	1.586	-	ASTM D 542

Source GMD, last updated:01/04/2000

Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	120	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	48	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	280 - 305	°C
Nozzle Temperature	275 - 300	°C
Front - Zone 3 Temperature	280 - 305	°C
Middle - Zone 2 Temperature	270 - 295	°C
Rear - Zone 1 Temperature	260 - 280	°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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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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