

LEXAN™ LUX7189 resin

Polycarbonate

SABIC Innovative Plastics Europe



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Technical Data

Product Description

Lexan* LUX7189 is an injection moldable, high light reflectance FR grade. Contains non-brominated, non-chlorinated flame retardant systems.

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet
Search for UL Yellow Card	• SABIC Innovative Plastics Europe • LEXAN™
Availability	• Europe
Additive	• Flame Retardant
Features	• Bromine Free • Chlorine Free • Flame Retardant
RoHS Compliance	• RoHS Compliant
Processing Method	• Injection Molding

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.30 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	22 g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	23.0 cm ³ /10min	ISO 1133
Molding Shrinkage - Flow (3.20 mm)	0.50 to 0.70 %	Internal Method

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus		
-- ³	2700 MPa	ASTM D638
--	2600 MPa	ISO 527-2/1
Tensile Strength		
Yield ⁴	60.0 MPa	ASTM D638
Yield	5.50 MPa	ISO 527-2
Break ⁴	52.0 MPa	ASTM D638
Break	50.0 MPa	ISO 527-2/50
Tensile Elongation		
Yield ⁴	6.0 %	ASTM D638
Yield	60 %	ISO 527-2/50
Break ⁴	110 %	ASTM D638
Break	50 %	ISO 527-2/50
Flexural Modulus		
50.0 mm Span ⁵	2700 MPa	ASTM D790
-- ⁶	2300 MPa	ISO 178
Flexural Strength		
-- ^{6,7}	90.0 MPa	ISO 178
Yield, 50.0 mm Span ⁵	98.0 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength ⁸		ISO 179/1eA
-30°C	11 kJ/m ²	
23°C	35 kJ/m ²	
Charpy Unnotched Impact Strength ⁸		ISO 179/1eU
-30°C	160 kJ/m ²	
23°C	160 kJ/m ²	
Notched Izod Impact		ASTM D256
-30°C	100 J/m	
23°C	150 J/m	
Unnotched Izod Impact (23°C)	2100 J/m	ASTM D4812

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Impact	Nominal Value Unit	Test Method
Instrumented Dart Impact 23°C, Energy at Peak Load	59.0 J	ASTM D3763
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load 0.45 MPa, Unannealed, 3.20 mm	135 °C	ASTM D648
1.8 MPa, Unannealed, 3.20 mm	125 °C	ASTM D648
1.8 MPa, Annealed ⁹	133 °C	ISO 75-2/Ae
Vicat Softening Temperature		
--	140 °C	ASTM D1525 ¹⁰
--	138 °C	ISO 306/B50
--	139 °C	ISO 306/B120
CLTE		ASTM E831
Flow : -40 to 40°C	0.000060 cm/cm/°C	
Transverse : -40 to 40°C	0.000065 cm/cm/°C	
Flammability	Nominal Value Unit	Test Method
Flame Rating		UL 94
1.50 mm	V-0	
2.50 mm	5VB	
3.00 mm	5VA	
Injection	Nominal Value Unit	
Drying Temperature	121 °C	
Drying Time	3.0 to 4.0 hr	
Drying Time, Maximum	48 hr	
Suggested Max Moisture	0.020 %	
Suggested Shot Size	40 to 60 %	
Rear Temperature	249 to 271 °C	
Middle Temperature	260 to 282 °C	
Front Temperature	271 to 293 °C	
Nozzle Temperature	266 to 288 °C	
Processing (Melt) Temp	271 to 293 °C	
Mold Temperature	71.1 to 93.3 °C	
Back Pressure	0.345 to 0.689 MPa	
Screw Speed	40 to 70 rpm	
Vent Depth	0.025 to 0.076 mm	

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

³ 50 mm/min

⁴ Type I, 50 mm/min

⁵ 1.3 mm/min

⁶ 2.0 mm/min

⁷ Yield

⁸ 80*10*3 sp=62mm

⁹ 2 hr, 120°C

¹⁰ Rate B (120°C/h), Loading 2 (50 N)

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SABIC Innovative Plastics Europe

Where to Buy

Supplier

SABIC Innovative Plastics Europe

, Netherlands

Telephone: +36-1-238-5060

Web: <http://www.sabic-ip.com/>

Distributor

GUZMAN GLOBAL S.L

Telephone: +34-963-992-400

Web: <http://www.grupoguzman.com/>

Availability: Italy, Portugal, Spain

Polymix

Telephone: +33-3-8920-1380

Web: <http://www.polymix.eu/>

Availability: France

RESINEX Group

RESINEX is a Pan European distribution company. Contact RESINEX for availability of individual products by country.

Telephone: +32-14-672511

Web: <http://www.resinex.com/>

Availability: Europe

Ultrapolymers

Ultrapolymers is a Pan European distribution company. Contact Ultrapolymers for availability of individual products by country.

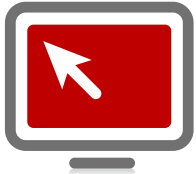
Telephone: +32-11-57-95-57

Web: <http://www.ultrapolymers.com/>

Availability: Belgium, Netherlands, South Africa



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– Kevin Chase, Owner & President, Chase Plastics



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