

ZENITE® 7755 - LCP

Description

55% glass/mineral-reinforced

Zenite 7755 is a 55% glass/mineral-reinforced liquid crystal polymer resin for injection molding. It has good impact resistance, excellent temperature resistance, and is suitable for applications in diverse industries.

Physical properties	Value	Unit	Test Standard
Density	1890	kg/m ³	ISO 1183
Molding shrinkage, parallel (flow)	0	%	ISO 294-4, 2577
Molding shrinkage, transverse normal	0.1	%	ISO 294-4, 2577
Humidity absorption, 23°C/50%RH	1.1	%	ISO 62

Mechanical properties	Value	Unit	Test Standard
Tensile modulus	17600	MPa	ISO 527-1, -2
Tensile stress at break, 5mm/min	100	MPa	ISO 527-1, -2
Tensile strain at break, 5mm/min	1	%	ISO 527-1, -2
Flexural modulus, 23°C	14000	MPa	ISO 178
Flexural strength, 23°C	185	MPa	ISO 178
Charpy notched impact strength, 23°C	6	kJ/m ²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
DTUL at 1.8 MPa	310	°C	ISO 75-1, -2
Coeff. of linear therm expansion, parallel	0.09	E-4/°C	ISO 11359-2
Coeff. of linear therm expansion, normal	0.39	E-4/°C	ISO 11359-2
Flammability at thickness h	V-0	class	UL 94
thickness tested (h)	1.50	mm	UL 94
UL recognition (h)	UL	-	UL 94

Typical injection moulding processing conditions

Pre Drying	Value	Unit
Necessary low maximum residual moisture content	0.01	%
Drying time	3	h
Drying temperature	150	°C

Temperature	Value	Unit
Hopper temperature	20 - 30	°C
Feeding zone temperature	40 - 60	°C
Zone1 temperature	355 - 365	°C
Zone2 temperature	360 - 370	°C
Zone3 temperature	360 - 370	°C
Zone4 temperature	360 - 370	°C
Nozzle temperature	360 - 370	°C
Melt temperature	365 - 375	°C
Mold temperature	80 - 120	°C

Pressure	Value	Unit
Injection pressure	500 - 1500	bar
Hold pressure	500 - 1500	bar
Back pressure max.	30	bar

Characteristics

Special Characteristics Flame retardant, Heat resistant, High flow, Lead-free soldering

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Product Categories Mineral/Glass reinforced

Processing Injection molding

Contact

Americas

8040 Dixie Highway
Florence, KY 41042 USA
Product Information Service
t: +1-800-833-4882
t: +1-859-372-3244
Customer Service
t: +1-800-526-4960
t: +1-859-372-3214
e: info-engineeredmaterials-am@celanese.com

Asia

4560 Jinke Road
Zhang Jiang Hi Tech Park
Shanghai 201210 PRC
Customer Service
t: +86 21 3861 9288
e: info-engineeredmaterials-asia@celanese.com

Europe

Am Unisys-Park 1
65843 Sulzbach, Germany
Product Information Service
t: +49-800-86427-531
t: +49-(0)-69-45009-1011
e: info-engineeredmaterials-eu@celanese.com

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