

LOTTE CHEMICAL

PC-1070

Polycarbonate resin

General Information

Description

High viscosity, high impact strength
Mold release

Applications

Multi-Wall, Solid Sheet, LCD Light Guide Panel

Typical properties¹

	Test Method	Typical value	Unit
Physical			
Melt Flow Index, 300 °C, 1.2kg	ASTM D1238	7	g/10min
Specific Gravity	ASTM D792	1.20	
Mold Shrinkage	ASTM D955	0.5-0.7	%
Mechanical			
Tensile Strength, yield, 50mm/min	ASTM D638	630	kgf/cm ²
Tensile Elongation, break, 50mm/min	ASTM D638	>100	%
Flexural Strength, yield, 10mm/min	ASTM D790	920	kgf/cm ²
Flexural Modulus, 10mm/min	ASTM D790	24,000	kgf/cm ²
IZOD Impact Strength, notched, 23 °C, 1/8"	ASTM D256	85	kg-cm/cm
notched, 23 °C, 1/4"	ASTM D256	-	kg-cm/cm
Thermal			
Heat Distortion Temp. 4.6kgf/cm ²	ASTM D648	144	°C
18.6kgf/cm ²	ASTM D648	133	°C
Vicat Softening Temp. Rate B/50	ASTM D1525	153	°C
Optical			
Light Transmittance	ASTM D1003	89	%
Haze	ASTM D1003	< 0.8	%
Refractive Index	ASTM D542	1.585	

Notes

ISO 9001, 14001, /TS 16949

¹ Typical properties : these are not to be construed as specifications.

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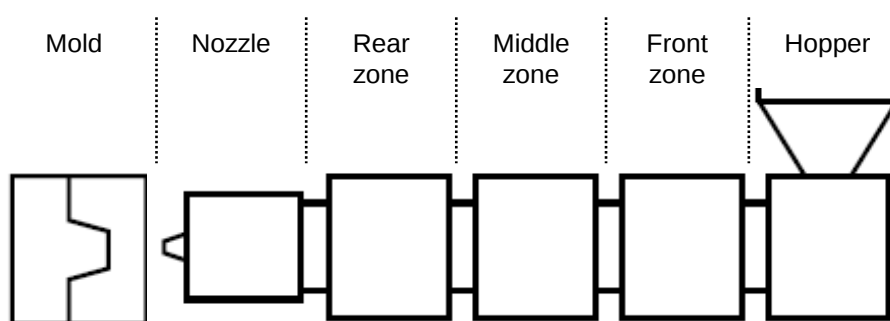
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Processing guides¹

	Typical value	Unit
Drying condition		
Drying temperature	120	°C
Drying time	4	hr
Maximum moisture content	0.02	%
Injection molding		
Melt temperature	290 ~ 310	°C
Nozzle temperature	280 ~ 300	°C
Barrel	Rear zone	290 ~ 310
	Middle zone	280 ~ 300
	Front zone	270 ~ 290
Hopper temperature	60 ~ 80	°C
Mold temperature	60 ~ 90	°C



Recycling

Sprues and runners can be reground with virgin resin within the ratio of 20%. Care must be taken to ensure that the regrind is free from impurities and regrind should not be used in applications where impact performance and/or agency compliance are required.

Notes

ISO 9001, 14001, /TS 16949

¹ Processing guides : Typical processing parameters are noted. Actual processing conditions will depend on machine size, mold design, material residence time, shot size, etc.

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