LOTTE CHEMICAL

PC-1070U

Polycarbonate resin

General Information

Description

PC-1070U has higher viscosity, impact strength, tensile & flexural strength, and elastic modulus, which can be used in sheet-extrusion and stringent demand such as and goggles etc. PC-1070U have UV stabilized ingredients to prevent degradation of final PC products from lights.

Applications

OUTDOOR APPLICATION, MULTI-WALL, SOLID SHEET

Typical properties[1]

	Test Method	Typical value	Unit
Physical			
Melt Flow Index, 300℃, 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 ℃, 1/8”	ASTM D256	**85**	kg·cm/cm
notched, 23 ℃, 1/4”	ASTM D256	**-**	kg·cm/cm
Thermal			
Heat Distortion Temp. 4.6kgf/cm^2	ASTM D648	**144**	℃
18.6kgf/cm^2	ASTM D648	**133**	℃
Vicat Softening Temp. Rate B/50	ASTM D1525	**153**	℃
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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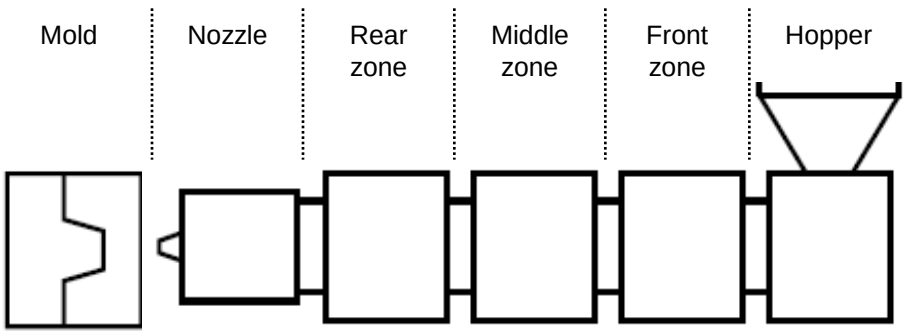
Processing guides[1]

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



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.