

LI970 Co-Extrusion

Description

- Good Weatherability, Scratch Resistance

Applications - Window Profile, Siding, Rain Gutter

Properties	Method	Unit	LI970
Physical			
Specific Gravity , 23°C	ASTM D792		1.12
Mold Shrinkage , 23°C, 3.2mm , 23°C	ASTM D955	%	0.4 ~ 0.7
Melt Flow Rate , 220°C, 10kg	ASTM D1238	g/10min	12
Mechanical			'
Tensile Strength at Yield , 23℃, 50mm/min, 3.2mm	ASTM D638	MPa	46
Tensile Elongation at Break , 23°C, 50mm/min, 3.2mm	ASTM D638	%, (Min)	15
Tensile Modulus , 23°C, 50mm/min, 3.2mm	ASTM D638	MPa	2040
Flexural Strength , 23°C, 15mm/min, 3.2mm	ASTM D790	MPa	75
Flexural Modulus , 23°C, 15mm/min, 3.2mm	ASTM D790	MPa	2150
Izod Impact Strength , Notched, 3.2mm, 23℃	ASTM D256	J/m	175
lzod Impact Strength , Notched, 3.2mm, -30℃	ASTM D256	J/m	40
lzod Impact Strength , Notched, 6.4mm, 23℃	ASTM D256	J/m	125
lzod Impact Strength , Notched, 6.4mm, -30 $^\circ\!$	ASTM D256	J/m	40
Rockwell Hardness , R-Scale	ASTM D785		103
Thermal			
HDT , Edgewise, 1.82MPa, 6.4mm, Unannealed	ASTM D648	C	82
VICAT , 50N, 50℃/h	ASTM D1525	C	90

Note

Typical values can be used only for the purpose of selecting material, and there can be variation within normal tolerances for various colors. Values given should not be interpreted as specification and not be used for designing part or tool. All properties, except melt flow rate are measured by injection molded specimens after 48 hours storage at 23°C, 50% relative humidity.

Updated Date : 15-Nov-17 Issued Date : 3-May-22

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Processing Guide (Injection Molding)				
Processing Parameters	Unit	Value		
Drying Temperature	C	80 ~ 90		
Drying Time	hrs	2 ~ 3		
Moisture Content	%	0.01 ~		
Melt Temperature	C	200 ~ 230		
Nozzle Temperature	C	210 ~ 220		
Mold Temperature	Ĉ	40 ~ 80		
Back Pressure, Hydraulic Type	kg/cm²	5 ~ 10		
Screw Speed	rpm	50 ~ 100		

Note

Back Pressure & Measuring Speed are only mentioned as general guidelines. These may not apply or need adjustment in specific situations such as low shot sizes, thin wall molding and gas-assist molding.

Processing Guide (Extrusion Molding)				
Processing Parameters	Unit	Value		
Drying Temperature	ĉ	80 ~ 90		
Drying Time	hrs	2 ~ 3		
Moisture Content	%	0.01 ~ 0.01		
Melt Temperature	ĉ	200 ~ 230		
Barrel Temperature, Zone 1	ĉ	190 ~ 200		
Barrel Temperature, Zone 2	ĉ	200 ~ 220		
Barrel Temperature, Zone 3	ĉ	210 ~ 230		
Barrel Temperature, Zone 4	ĉ	210 ~ 230		
Adapter Temperature	ĉ	210 ~ 230		
Die Temperature	ĉ	210 ~ 250		
Roll Stack Temperature, Top	ĉ	70 ~ 90		
Roll Stack Temperature, Middle	ĉ	70 ~ 90		
Roll Stack Temperature, Bottom	ĉ	70 ~ 100		

Note

Recommend initial lower temperatures settings to avoid material degradation/hang-up in die & purge material from extruder prior to shutdown.

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