

# PC-1220U

Polycarbonate resin

#### **General Information**

## Description

PC-1220U is a low viscosity, clear polycarbonate, which is suitable for outdoor injection applications. PC-1220U have UV stabilized ingredients to prevent degradation of final PC products from lights.

### Applications

#### **OUTDOOR AND LIGHT EXPOSED INJECTION PRODUCTS**

Typical properties <sup>1</sup>				
	Test Method	Typical value	Unit	
Physical				
Melt Flow Index, 300°C, 1.2kg	ASTM D1238	22	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 <sup>2</sup>	
Tensile Elongation, break, 50mm/min	ASTM D638	> 100	%	
Flexural Strength, yield, 10mm/min	ASTM D790	920	kgf/cm <sup>2</sup>	
Flexural Modulus, 10mm/min	ASTM D790	24,000	kgf/cm <sup>2</sup>	
IZOD Impact Strength, notched, 23 ℃, 1/8"	ASTM D256	70	kg·cm/cm	
notched, 23 ℃, 1/4"	ASTM D256	-	kg·cm/cm	
Thermal				
Heat Distortion Temp. 4.6kgf/cm <sup>2</sup>	ASTM D648	139	°C	
18.6kgf/cm <sup>2</sup>	ASTM D648	128	°C	
Vicat Softening Temp. Rate B/50	ASTM D1525	150	°C	
Optical				
Light Transmittance	ASTM D1003	89	%	
Haze	ASTM D1003	< 0.8	%	
Refractive Index	ASTM D542	1.585		

l l	Notes	ISO 9001, 14001, /TS 16949

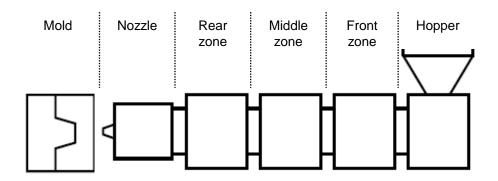
<sup>&</sup>lt;sup>1</sup> Typical properties : these are not to be construed as specifications.



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## Polycarbonate resin

Processing guides <sup>1</sup>				
		Typical value	Unit	
Drying condition				
Drying temperature		120	${\mathbb C}$	
Drying time		4	hr	
Maximum moisture content		0.02	%	
Injectio	n molding			
Melt temperature		290 ~ 310	$^{\circ}$	
Nozzle temperature		280 ~ 300	${\mathbb C}$	
	Rear zone	290 ~ 310	${\mathbb C}$	
Barrel	Middle zone	280 ~ 300	${\mathbb C}$	
	Front zone	270 ~ 290	${\mathbb C}$	
Hopper temperature		60 ~ 80	${\mathbb C}$	
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

<sup>&</sup>lt;sup>1</sup> Processing guides: Typical processing parameters are noted. Actual processing conditions will depend on machine size, mold design, material residence time, shot size, etc.