

# PC-1100U

Polycarbonate resin

### **General Information**

## Description

PC-1100U is a medium viscosity, clear polycarbonate, which is suitable for outdoor injection applications. PC-1100U have UV stabilized ingredients to prevent degradation of final PC products from lights.

## Applications

#### **SHEET EXTRUSION & INJECTION GRADE**

	Typical properties	ı	
	Test Method	Typical value	Unit
Physical			
Melt Flow Index, 300 °C, 1.2kg	ASTM D1238	10	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 °C, 1/8"	ASTM D256	80	kg·cm/cm
notched, 23 $^{\circ}\!$	ASTM D256	-	kg·cm/cm
Thermal			
Heat Distortion Temp. 4.6kgf/cm <sup>2</sup>	ASTM D648	143	${\mathbb C}$
18.6kgf/cm <sup>2</sup>	ASTM D648	132	${\mathbb C}$
Vicat Softening Temp. Rate B/50	ASTM D1525	150	${\mathbb C}$
Optical			
Light Transmittance	ASTM D1003	89	%
Haze	ASTM D1003	< 0.8	%
Refractive Index	ASTM D542	1.585	

Notes	ISO 9001, 14001, /TS 16949

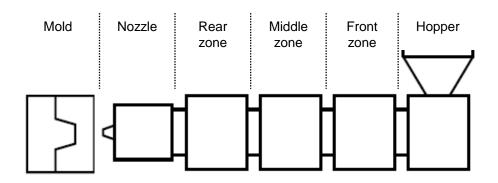
<sup>&</sup>lt;sup>1</sup> Typical properties: these are not to be construed as specifications.



# PC-1100U

## 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	%	
Injection 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.