

# HOPELEX PC-1100U

Polycarbonate resin

#### **General Information**

## Description

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

#### Applications

**Injection Products** 

## Typical properties<sup>1</sup>

	Test Method	Typical value	Unit		
Physical	•, ()	•			
Melt Flow Index, 300℃, 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 ℃, 1/8"	ASTM D256	80	kg·cm/cm		
notched, 23 ℃, 1/4"	ASTM D256	-	kg·cm/cm		
Thermal					
Heat Distortion Temp. 4.6kgf/cm <sup>2</sup>	ASTM D648	143	°C		
18.6kgf/cm <sup>2</sup>	ASTM D648	132	$^{\circ}$		
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			

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

ISO 9001, 14001, /TS 16949

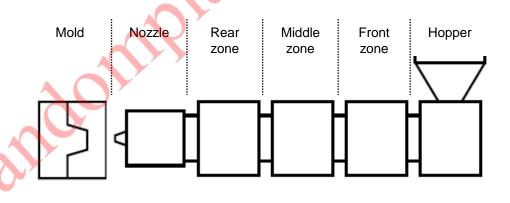


## HOPELEX PC-1100U

## Polycarbonate resin

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<b>Processing</b>	auides '

		Typical value	Unit
Drying	condition		
Drying temperature		120	Ĉ
Drying time 4		4	hr
Maximu	m moisture content	0.02	%
Injection molding			
Melt temperature		290 ~ 310	°C
Nozzle temperature		280 ~ 300	°C
	Rear zone	290 ~ 310	°C
Barrel	Middle zone	280 ~ 300	°C
	Front zone	270 ~ 290	°C
Hopper temperature		60 ~ 80	C
Mold temperature		60 ~ 90	$^{\circ}$



## 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.