

## HOPELEX AF-3100

PC/ABS/GF alloy resin

### General information

#### Description

10% glass-fiber reinforced PC/ABS, easy mold release  
 Non-brominated, non-chlorinated flame retardant  
 Optimum combination of high modulus and impact strength

#### Applications

Electric housing, etc.

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

	Test method	Typical value	Unit	
<b>Physical</b>				
Melt Flow Index, 300°C, 1.2 kg	ASTM D1238	-	g/10 min	
Specific Gravity	ASTM D792	1.2		
Mold Shrinkage	ASTM D955	0.3~0.4	%	
<b>Mechanical</b>				
Tensile Strength, yield, 50 mm/min	ASTM D638	900	kg <sub>f</sub> /cm <sup>2</sup>	
Tensile Elongation, break, 50 mm/min	ASTM D638	> 6	%	
Flexural Strength, yield, 10 mm/min	ASTM D790	1,100	kg <sub>f</sub> /cm <sup>2</sup>	
Flexural Modulus, 10 mm/min	ASTM D790	40,000	kg <sub>f</sub> /cm <sup>2</sup>	
IZOD Impact Strength, notched, 23°C, 1/8"	ASTM D256	10	kg <sub>f</sub> -cm/cm	
	notched, 23°C, 1/4"	ASTM D256	-	kg <sub>f</sub> -cm/cm
	notched, -30°C, 1/8"	ASTM D256	-	kg <sub>f</sub> -cm/cm
<b>Thermal</b>				
Heat Distortion Temp.	4.6 kg <sub>f</sub> /cm <sup>2</sup>	ASTM D648	-	°C
	18.6 kg <sub>f</sub> /cm <sup>2</sup>	ASTM D648	115	°C
Vicat Softening Temp.	Rate B/50	ASTM D1525	-	°C
<b>Flammability</b>				
UL94 V-0	UL94	1.5	mm	
UL94 V-0	UL94	3.0	mm	

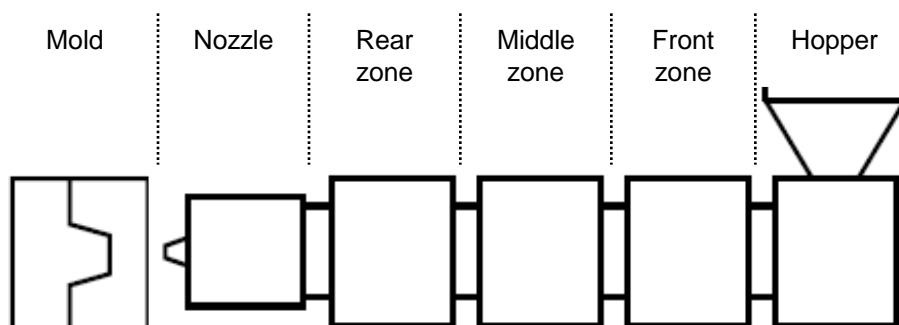
### Notes

ISO 9001, 14001, TS 16949

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

### Processing guides<sup>1</sup>

	Typical value	Unit
<b>Drying condition</b>		
Drying temperature	90 ~ 100	°C
Drying time	4	hr
Maximum moisture content	0.02	%
<b>Injection molding</b>		
Melt temperature	280 ~ 300	°C
Nozzle temperature	270 ~ 290	°C
Barrel	Rear zone	280 ~ 300
	Middle zone	270 ~ 290
	Front zone	260 ~ 280
Hopper temperature	60 ~ 80	°C
Mold temperature	60 ~ 80	°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>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.