

HF-380 (High Flow Grade)

Application

Air-conditioner, telephone, electric fan, mixer, water purifier, toy, kitchen good etc.

Feature

Though high flow grade HF-380 has good flowability and excellent processability, the impact and tensile strength could be varied. So it is desirable that the grade is carefully selected by its characteristics for better injection conditions and shape of final products.

Properties	Test Method	Test Condition	Unit	Value
Physical				
Specific Gravity	ASTM D792		g/cc	1.04
Molding Shrinkage	ASTM D955		%	0.4~0.7
Melt Flow Index	ASTM D1238(G)	200°C / 5kg	g/10min	4
	—	220°C / 10kg	g/10min	42
	ASTM D1238(I)	230°C / 3.8kg	g/10min	15
Mechanical				
Tensile Strength at yield	ASTM D638	50mm/min	kg/cm ²	440
			lb/in ²	6,300
Tensile Modulus	ASTM D638	1mm/min	kg/cm ²	21,900
			lb/in ²	
Elongation at yield	ASTM D638	50mm/min	%	6
Elongation at break	ASTM D638	50mm/min	%	16
Flexural Strength at yield	ASTM D790	15mm/min	kg/cm ²	700
			lb/in ²	9,900
Flexural Modules	ASTM D790	15mm/min	kg/cm ²	24,500
			lb/in ²	348,000
Izod Impact Strength (Noched)	ASTM D256	1/4" , '23°C	kg·cm/cm	29
		1/4" , '-30°C	kg·cm/cm	12
		1/8" , '23°C	kg·cm/cm	32
		1/8" , '-30°C	kg·cm/cm	13
Rockwell Hardness	ASTM D785	R-Scale	—	107
Thermal				
Heat Deflection Temp	ASTM D648	18.5kg/cm ² , 1/4" (annealed)	°C	90
			°F	194
		18.5kg/cm ² , 1/4" (unannealed)	°C	87
			°F	189
		4.6kg/cm ² , 1/4" (annealed)	°C	92
			°F	198
4.6kg/cm ² , 1/4" (unannealed)	°C	89		
	°F	192		
Vicat Softening Temp	ASTM D1525	5kg, 50°C/h	°C	93
			°F	199
Flammability	UL94	1/8"	class	HB
		1/10"	class	
		1/16"	class	HB
	IEC707	1/8"	mm/min	FH3-35
		1/16"	mm/min	