

# TR-557 (Transparent Grade)

## Application

Washer, vaccum cleaner, air-conditioner etc. home appliance ,copyer, facsmilie, printer etc.

## Feature

TR-557 has excellent transparency, impact strength physical properties and processability . Since its properties are well balanced, it can be applied widely to variety of electronic parts, OA machines requiring transparency and high impact.

Properties	Test Method	Test Condition	Unit	Value
<b>Physical</b>				
Specific Gravity	ASTM D792		g/cc	1.09
Molding Shrinkage	ASTM D955		%	0.4~0.7
Melt Flow Index	ASTM D1238(G)	200℃/ 5kg	g/10min	2
	—	220℃/ 10kg	g/10min	21
	ASTM D1238(I)	230℃/ 3.8kg	g/10min	7
<b>Mechanical</b>				
Tensile Strength at yield	ASTM D638	50mm/min	kg/cm <sup>2</sup>	430
			lb/in <sup>2</sup>	6,100
Tensile Modulus	ASTM D638	1mm/min	kg/cm <sup>2</sup>	21,200
			lb/in <sup>2</sup>	
Elongation at yield	ASTM D638	50mm/min	%	6
Elongation at break	ASTM D638	50mm/min	%	50
Flexural Strength at yield	ASTM D790	15mm/min	kg/cm <sup>2</sup>	670
			lb/in <sup>2</sup>	9,500
Flexural Modules	ASTM D790	15mm/min	kg/cm <sup>2</sup>	20,400
			lb/in <sup>2</sup>	290,000
Izod Impact Strength (Noched)	ASTM D256	1/4" , '23℃	kg·cm/cm	15
		1/4" , '-30℃	kg·cm/cm	7
		1/8" , '23℃	kg·cm/cm	16
		1/8" , '-30℃	kg·cm/cm	6
Rockwell Hardness	ASTM D785	R-Scale	—	105
<b>Thermal</b>				
Heat Deflection Temp	ASTM D648	18.5kg/cm <sup>2</sup> , 1/4" (annealed)	℃	86
			°F	187
		18.5kg/cm <sup>2</sup> , 1/4" (unannealed)	℃	88
			°F	190
		4.6kg/cm <sup>2</sup> , 1/4" (annealed)	℃	95
			°F	203
4.6kg/cm <sup>2</sup> , 1/4" (unannealed)	℃	90		
	°F	194		
Vicat Softening Temp	ASTM D1525	5kg, 50℃/h	℃	91
			°F	196
Flammability	UL94	1/8"	class	HB
		1/10"	class	
		1/16"	class	HB
	IEC707	1/8"	mm/min	
		1/16"	mm/min	