

# AF312A (FlameRetardantGrade)



LG Chem

## Application

(TBBA flame retardants) Electric parts requiring flame retardant property.

## Feature

AF312A is specifically engineered to meet the need for high performance products in the flame retardant resin applications. AF312A provides an optimum balance of physical properties, high heat resistance, outstanding UV stability and good finished part aesthetics.

Properties	Test Method	Test Condition	Unit	Value
<b>Physical</b>				
Specific Gravity	ASTM D792		-	1.19
Molding Shrinkage	ASTM D955		%	0.4~0.7
Melt Flow Index	ASTM D1238(G)	200°C/ 5kg	g/10min	6.5
	-	220°C/ 10kg	g/10min	55
	ASTM D1238(I)	230°C/ 3.8kg	g/10min	16
<b>Mechanical</b>				
Tensile Strength at yield	ASTM D638	50mm/min	kg/cm <sup>2</sup>	440
Tensile Modulus	ASTM D638	1mm/min	kg/cm <sup>2</sup>	23,000
Elongation at yield	ASTM D638	50mm/min	%	5
Elongation at break	ASTM D638	50mm/min	%	20
Flexural Strength at yield	ASTM D790	15mm/min	kg/cm <sup>2</sup>	720
Flexural Modules	ASTM D790	15mm/min	kg/cm <sup>2</sup>	27,000
Izod Impact Strength (Noched)	ASTM D256	1/4" , '23°C	kg·cm/cm	23
		1/4" , '-30°C	kg·cm/cm	8
		1/8" , '23°C	kg·cm/cm	27
		1/8" , '-30°C	kg·cm/cm	8
Rockwell Hardness	ASTM D785	R-Scale	-	104
<b>Thermal</b>				
Heat Deflection Temp	ASTM D648	18.5kg/cm <sup>2</sup> , 1/4" (unannealed)	°C	76
		4.6kg/cm <sup>2</sup> , 1/4" (unannealed)	°C	84
Vicat Softening Temp	ASTM D1525	5kg, 50°C/h	°C	83
Flammability	UL94	1/8"	class	V-0, 5VB
		1/10"	class	V-0, 5VB
		1/16"	class	V-0
Relative Temp Index	UL 746B	Elec	°C	85
		Mech w/impact	°C	75
		Mech w/o impact	°C	75
<b>Recommended Processing Condition</b>				
Injection molding-Melt temperatrue			°C	200~220
Injection molding-Mold temperatrue			°C	40~80
Injection molding-Pre-drying Temperature			°C	80~90
Injcetion molding-Pre-drying Time			hrs	2~4

\* These property values are typical representative for natural color and are not intended for specification purpose.

When pigments are loaded, there might be slight change in the properties.

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