

performanceplastics

AF312C ABS: Flame Retardant

AF-312C is specifically engineered to meet the need for high performance products in the flame retardant resin applications. AF-312C provides an optimum balance of physical properties, high heat resistance, outstanding UV stability and good finished part aesthetics.

Properties

Physical	Method	Condition	Unit	Value
Melt Index	ASTM D1238	200°C/5kg	g/10min	5.1
	ASTM D1238	220°C/10kg	g/10min	53
	ASTM D1238	230°C/3.8kg	g/10min	17.1
Specific Gravity	ASTM D792	23°C	–	1.18
Mold Shrinkage	ASTM D955	–	%	0.4~0.7

Mechanical	Method	Condition	Unit	Value
Tensile Strength at Yield	ASTM D638	50mm/min	MPa	43.4
Tensile Modulus	ASTM D638	50mm/min	MPa	22,000
Elongation at Yield	ASTM D638	50mm/min	%	5
Elongation at Break	ASTM D638	50mm/min	%	20
Flexural Strength	ASTM D790	15mm/min	MPa	71.1
Flexural Modulus	ASTM D790	15mm/min	MPa	27000
IZOD Impact strength	ASTM D256	6.4mm, 23°C	J/m	245
	ASTM D256	6.4mm, -30°C	J/m	78.4
	ASTM D256	3.2mm, 23°C	J/m	284.2
	ASTM D256	3.2mm, -30°C	J/m	78.4

Thermal	Method	Condition	Unit	Value
Heat Deflection Temp	ASTM D648	6.4mm, 18.5kg/cm ² (unannealed)	°C	76
	ASTM D648	6.4mm, 4.6kg/cm ² (unannealed)	°C	88
	ASTM D648	6.4mm, 18.5kg/cm ² (annealed)	°C	84
	ASTM D648	6.4mm, 4.6kg/cm ² (annealed)	°C	83
Vicat Softening Temp	ASTM D1525	5kg, 50°C/hr	°C	84

Flammability	Method	Condition	Unit	Value
Flammability	UL94	3.2mm	class	V-0
	UL94	1.6mm	Class	V-0

The values quoted are the average of results obtained under laboratory conditions and are given only as an indication to enable customers to make use of our products.

Prospective users should determine the suitability of materials before adopting them on a commercial scale.

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