

Product Texts

Product-nomenclature: ISO 16396-PA66 PA 6,FR,M1F2HR,C14-040N

Product Attributes

Flame retardant

Markets

Automotive

Automotive electr. and electronics, lighting

Electricals & Electronics

Electrical appliances, Electrical equipment, Cables & Tubes, Connectors, Energy distribution, Lighting

Industry & Consumer goods

Housewares

Approvals

Burning Behaviour

UL V0

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.7 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.8 / *	%	ISO 294-4, 2577
^[C] Density of melt	950	kg/m ³	-
^[C] Thermal conductivity of melt	0.22	W/(m K)	-
^[C] Spec. heat capacity of melt	2500	J/(kg K)	-
^[C] Eff. thermal diffusivity	9.26E-8	m ² /s	-
^[C] Ejection temperature	200	°C	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	3600 / 1600	MPa	ISO 527
^[C] Yield stress	85 / 50	MPa	ISO 527
^[C] Yield strain	4 / 15	%	ISO 527
^[C] Nominal strain at break	10 / >50	%	ISO 527
^[C] Charpy impact strength, +23°C	75 / -	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	70 / -	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	4 / 15	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	3 / 3	kJ/m ²	ISO 179/1eA
^[C] Puncture - maximum force, +23°C	20 / 4050	N	ISO 6603-2
^[C] Puncture energy, +23°C	55 / -	J	ISO 6603-2
^[C] Shore D hardness	70 / *	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	260 / *	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	70 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	210 / *	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	70 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	90 / *	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
^[C] Burning Behav. at thickness h	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.4 / *	mm	-
^[C] Oxygen index	35 / *	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	3 / 8	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	3 / 4	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	50 / 1500	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	150 / 700	E-4	IEC 62631-2-1
^[C] Volume resistivity	1E11 / 1E9	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	* / 1E10	Ohm	IEC 62631-3-2
^[C] Electric strength	28 / 26	kV/mm	IEC 60243-1
^[C] Comparative tracking index	- / 600	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	8 / *	%	Sim. to ISO 62
^[C] Humidity absorption	2.5 / *	%	Sim. to ISO 62
^[C] Density	1160 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
^[C] Injection Molding, melt temperature	280	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294
Injection Molding, injection velocity	200	mm/s	ISO 294
Injection Molding, pressure at hold	75	MPa	ISO 294

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Delivery form

Granules, Natural Color

Special Characteristics

Flame retardant

Applications

Automotive, Electrical and Electronical

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa