

Product Texts

Product-nomenclature: ISO 16396-PA6-I,,M1HR,S18-020N

Product Attributes

Highly flexible, Improved impact resistance, Barrier material

Markets

Electricals & Electronics

Cables & Tubes

Industry & Consumer goods

Hydraulics & Pneumatics, Mechanical Engineering, Power transmission, Tools & Accessories

Packaging

Blow moulded containers, Injectionstretchblowmoulded containers

Approvals

Food Contact

EU Requirements, FDA

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	35 / *	cm ³ /10min	ISO 1133
Temperature	275 / *	°C	-
Load	5 / *	kg	-
^[C] Molding shrinkage, parallel	1.1 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.4 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	1800 / 600	MPa	ISO 527
^[C] Yield stress	50 / 25	MPa	ISO 527
^[C] Yield strain	4 / 15	%	ISO 527
^[C] Nominal strain at break	>50 / >50	%	ISO 527
^[C] Charpy notched impact strength, +23°C	65 / 115	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	15 / 15	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	222 / *	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	50 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	130 / *	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	130 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	150 / *	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Volume resistivity	1E12 / 1E11	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	* / 1E12	Ohm	IEC 62631-3-2
^[C] Electric strength	42 / 39	kV/mm	IEC 60243-1
^[C] Comparative tracking index	- / 600	-	IEC 60112

[C]: CAMPUS

Optical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Gloss, 60°	60 / *	-	ISO 2813

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	9 / *	%	Sim. to ISO 62
^[C] Humidity absorption	3 / *	%	Sim. to ISO 62
^[C] Density	1060 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Film Properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Stress at yield, parallel	22 / *	MPa	ISO 527-3
^[C] Stress at yield, normal	20 / *	MPa	ISO 527-3
^[C] Strain at yield, parallel	13 / *	%	ISO 527-3
^[C] Strain at yield, normal	13 / *	%	ISO 527-3
^[C] Maximum stress, parallel	70 / *	MPa	ISO 527-3
^[C] Maximum stress, normal	60 / *	MPa	ISO 527-3
^[C] Maximum strain, parallel	800 / *	%	ISO 527-3
^[C] Maximum strain, normal	700 / *	%	ISO 527-3
^[C] Elmendorf Tear resistance, parallel	35 / *	N	ISO 6383-2
^[C] Elmendorf Tear resistance, normal	50 / *	N	ISO 6383-2
^[C] Trouser Tear resistance, parallel	20 / *	N/mm	ISO 6383-1
^[C] Trouser Tear resistance, normal	20 / *	N/mm	ISO 6383-1
^[C] WVTR, 23°C/85%r.h.	13 / *	g/(m ² *d)	ISO 15106-1/-2
^[C] Oxygen transmission rate, 23°C/0%r.h.	45 / *	cm ³ /(m ² *d*bar)	ISO 15105-1/-2
^[C] Oxygen transmission rate, 23°C/85%r.h.	80 / *	cm ³ /(m ² *d*bar)	ISO 15105-1/-2
^[C] Carbon Dioxide transm. rate, 23°C/0%r.h.	150 / *	cm ³ /(m ² *d*bar)	ISO 15105-1/-2
^[C] Carbon Dioxide transm. rate, 23°C/85%r.h.	500 / *	cm ³ /(m ² *d*bar)	ISO 15105-1/-2

[C]: CAMPUS

Characteristics

Processing

Injection Molding, Other Extrusion, Blow Molding

Delivery form

Granules, Natural Color

Special Characteristics

High impact or impact modified

Features

Barrier Properties

Certifications

Food contact, Food approval FDA 21 CFR

Applications

Electrical and Electronical, Packaging

Regional Availability

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