Grilamid L 25A NZ natural

PA12 EMS-GRIVORY | a unit of EMS-CHEMIE AG

Product Texts

Product-nomenclature: ISO 16396-PA12-I,,EH,C24-007

Product Attributes

High viscosity, Hydrolysis resistant, Improved impact resistance, Improved heat resistance, Improved UV resistance (outdoor use)

Markets

Automotive
Air intake sytems, Compressed air systems, Cooling and climate control
Electricals & Electronics
Cables & Tubes
Industry & Consumer goods
Hydraulics & Pneumatics, Sports & Leisure

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
[C] Molding shrinkage, parallel	**1.0 / ***	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**1.6 / ***	%	ISO 294-4, 2577
[C] Density of melt	**840**	kg/m³	-
[C] Thermal conductivity of melt	**0.22**	W/(m K)	-
[C] Spec. heat capacity of melt	**2900**	J/(kg K)	-
[C] Eff. thermal diffusivity	**9.03E-8**	m²/s	-
[C] Ejection temperature	**140**	°C	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**- / 750**	MPa	ISO 527
[C] Yield stress	**- / 30**	MPa	ISO 527
[C] Yield strain	**- / 15**	%	ISO 527
[C] Nominal strain at break	**- / >50**	%	ISO 527
[C] Charpy impact strength, +23°C	**- / N**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**- / N**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**- / 100**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**- / 75**	kJ/m²	ISO 179/1eA
[C] Shore D hardness	**66 / ***	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**178 / ***	°C	ISO 11357-1/-3
[C] Temp. of deflection under load, 1.80 MPa	**45 / ***	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**80 / ***	°C	ISO 75-1/-2
[C] Coeff. of linear therm. expansion, parallel	**120 / ***	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**140 / ***	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at thickness h	**HB / ***	class	IEC 60695-11-10
Thickness tested	**0.8 / ***	mm	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Volume resistivity	**- / 1E11**	Ohm*m	IEC 62631-3-1
[C] Surface resistivity	*** / 1E12**	Ohm	IEC 62631-3-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	**1.3 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**0.6 / ***	%	Sim. to ISO 62
[C] Density	**980 / -**	kg/m³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
[C] Injection Molding, melt temperature	**250**	°C	ISO 294
Injection Molding, mold temperature	**40**	°C	ISO 294
Injection Molding, injection velocity	**250**	mm/s	ISO 294
Injection Molding, pressure at hold	**75**	MPa	ISO 294

[C]: CAMPUS

Characteristics

Processing
Injection Molding, Profile Extrusion, Other Extrusion

Delivery form
Granules, Natural Color

Special Characteristics
High impact or impact modified, Light stabilized or stable to light, U.V. stabilized or stable to weather, Heat stabilized or stable to heat

Chemical Resistance
Hydrolytically Stable

Applications
Automotive, Electrical and Electronical, Sports Equipment

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

Other text information

Blow molding
PREPROCESSING
Max. water content : <= 0.1 %
PROCESSING
Melt temperature : 220-260 °C
Grooved bush temp. : 120-140 °C
Barrel temp. : 220-260 °C
Head temp. : 220-250 °C

Please consider the information about the application of the materials.