TECHNICAL DATASHEET

Grilamid L XE 10930 natural

PA12-I

EMS-GRIVORY
Material Database

Physical
Low density

Chemical
Good chemical resistance

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

Product Information

Product-nomenclature: ISO 16396-PA12-IP,,EHL1,C22-010

Mechanical Properties	dry/cond	Unit	Standard
Tensile modulus	1000 / 700	MPa	ISO 527
Yield stress	40 / 35	MPa	ISO 527
Yield strain	17 / 20	%	ISO 527
Nominal strain at break	>50 / >50	%	ISO 527
Charpy impact strength, +23°C	N / N	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	N / N	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	17 / 110	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	3 / 3	kJ/m²	ISO 179/1eA
Shore D hardness	59 / -		ISO 7619-1
Shore A hardness (15s)	- / 59	-	ISO 868

Thermal Properties	dry/cond	Unit	Standard
Melting temperature, 10°C/min	173 / -	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	50 / -	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	120 / -	°C	ISO 75-1/-2

Electrical Properties	dry/cond	Unit	Standard
Electric strength	41 / 31	kV/mm	IEC 60243-1
Volume resistivity	1E9 / 1E8	Ohm*m	IEC 62631-3-1
Surface resistivity	- / 1E10	Ohm	IEC 62631-3-2

General Properties	dry/cond	Unit	Standard
Density	1040 / -	kg/m³	ISO 1183
Burning behav. at thickness h	HB / -	class	IEC 60695-11-10
Thickness tested	0.8 / -	mm	
Water absorption	1.7 / -	%	Sim. to ISO 62
Humidity absorption	0.7 / -	%	Sim. to ISO 62

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Processing Extrusion	Value	Unit	Standard
Length	24 - 25	mm	
Compression ratio	2.8 - 3.5		
Conveying zone	210 - 250	°C	
Compression zone	220 - 250	°C	
Metering zone	220 - 250	°C	
Melt	220 - 250	°C	
Die	220 - 250	°C	
Adapter	220 - 250	°C	

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