TECHNICAL DATASHEET

Grilamid XE 3982 natural

PA12-I

EMS-GRIVORY
Material Database

Processing
Other extrusion

Delivery form
Granules

Special Characteristics
Light stabilized or stable to light

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

Product Information

Product-nomenclature: ISO 16396-PA12-IP,,EHL,S24-002

Mechanical Properties	dry/cond	Unit	Standard
Tensile modulus	- / 195	MPa	ISO 527
Stress at 50% strain	- / 18	MPa	ISO 527
Strain at break	- / >50	%	ISO 527
Charpy impact strength, +23°C	- / N	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	- / N	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	- / N	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	- / 10	kJ/m²	ISO 179/1eA
Ball indentation hardness	- / 20	MPa	ISO 2039-1
Shore A hardness (15s)	- / 53	-	ISO 868

Thermal Properties	dry/cond	Unit	Standard
Melting temperature, 10°C/min	170 / -	°C	ISO 11357-1/-3
Temp. of deflection under load, 0.45 MPa	80 / -	°C	ISO 75-1/-2
Max. usage temperature (long term)	95	°C	ISO 2578
Max. usage temperature (short term)	150	°C	EMS

Electrical Properties	dry/cond	Unit	Standard
Electric strength	- / 39	kV/mm	IEC 60243-1
Comparative tracking index	- / 600		IEC 60112
Volume resistivity	- / 1E9	Ohm*m	IEC 62631-3-1
Surface resistivity	- / 1E11	Ohm	IEC 62631-3-2

General Properties	dry/cond	Unit	Standard
Density	990 / -	kg/m³	ISO 1183
Burning behav. at thickness h	HB / -	class	IEC 60695-11-10
Thickness tested	0.8 / -	mm	
Water absorption	1.2 / -	%	Sim. to ISO 62

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General Properties	dry/cond	Unit	Standard
Humidity absorption	0.5 / -	%	Sim. to ISO 62
Molding shrinkage, parallel	0.6 / -	%	ISO 294-4, 2577
Molding shrinkage, normal	1.4 / -	%	ISO 294-4, 2577

Processing Extrusion	Value	Unit	Standard
Length	24 - 25	mm	
Compression ratio	2.8 - 3.5		
Hopper zone	≥cooled	°C	
Conveying zone	220 - 230	°C	
Compression zone	230 - 240	°C	
Metering zone	230 - 240	°C	
Melt	230 - 240	°C	
Die	230 - 240	°C	
Adapter	230 - 240	°C	

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