TECHNICAL DATASHEET

Grilamid L 25 W 20 X natural 6504

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: ISO16396-PA12-IP,,EHL1,C22-005

Mechanical Properties	dry/cond	Unit	Standard
Tensile modulus	450 / 450	MPa	ISO 527
Yield stress	30 / 30	MPa	ISO 527
Yield strain	20 / 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	- / N	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	- / 6	kJ/m²	ISO 179/1eA
Ball indentation hardness	- / 35	MPa	ISO 2039-1
Shore A hardness (15s)	- / 65	-	ISO 868

Thermal Properties	dry/cond	Unit	Standard
Melting temperature, 10°C/min	174 / -	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	45 / -	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	95 / -	°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	- / 32	kV/mm	IEC 60243-1
Comparative tracking index	- / 600		IEC 60112
Volume resistivity	- / 1E11	Ohm*m	IEC 62631-3-1
Surface resistivity	- / 1E12	Ohm	IEC 62631-3-2

General Properties	dry/cond	Unit	Standard
Density	1020 / -	kg/m³	ISO 1183
Burning behav. at thickness h	HB / -	class	IEC 60695-11-10

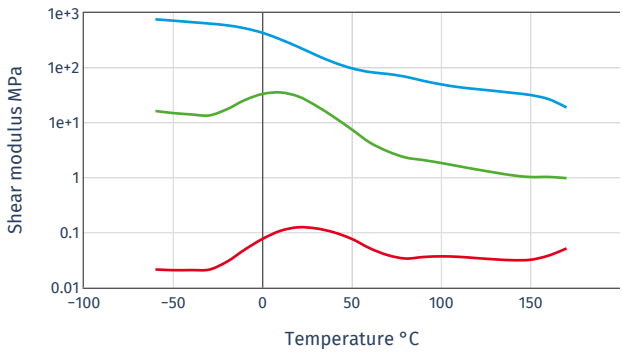
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General Properties	dry/cond	Unit	Standard
Thickness tested	0.8 / -	mm	
Water absorption	1.5 / -	%	Sim. to ISO 62
Humidity absorption	0.7 / -	%	Sim. to ISO 62
Molding shrinkage, parallel	0.8 / -	%	ISO 294-4, 2577
Molding shrinkage, normal	1.25 / -	%	ISO 294-4, 2577

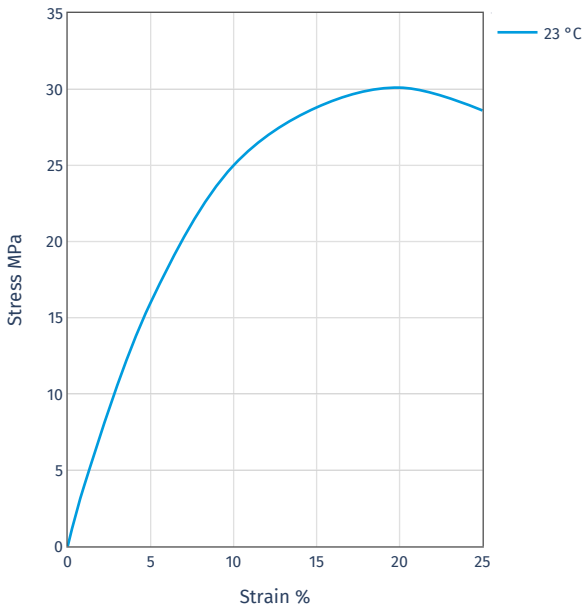
Processing Extrusion	Value	Unit	Standard
Length	24 - 26	mm	
Compression ratio	2.5		
Hopper zone	60 - 90	°C	
Conveying zone	200 - 230	°C	
Compression zone	210 - 230	°C	
Metering zone	210 - 230	°C	
Melt	220 - 230	°C	
Die	220 - 230	°C	
Adapter	220 - 230	°C	

Diagrams

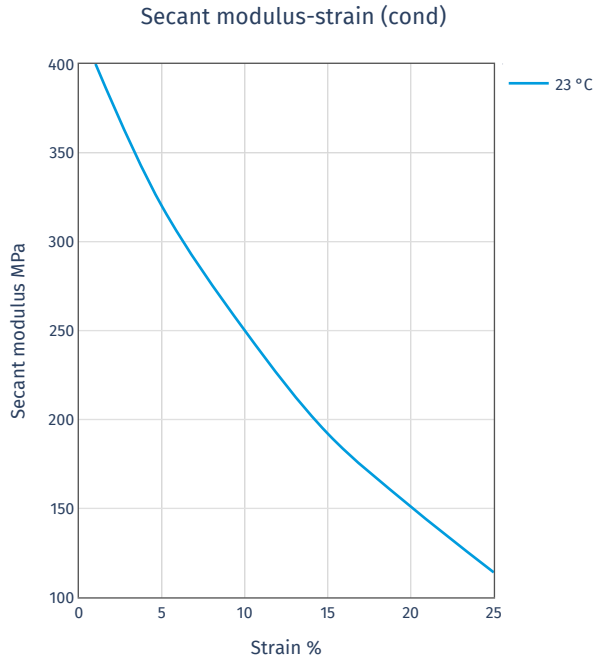
Dynamic shear modulus-temperature (cond)



Stress-strain (cond)



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