

Grivory GTR 45

PA6I/6T

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Product Texts

Product designation according to ISO 1874:

PA6I/6T, FT, 11-030

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	3000 / 3000	MPa	ISO 527-1/-2
Yield stress	100 / 100	MPa	ISO 527-1/-2
Yield strain	5 / 5	%	ISO 527-1/-2
Nominal strain at break	>50 / >50	%	ISO 527-1/-2
Charpy notched impact strength (+23°C)	8 / 8	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	8 / 2	kJ/m ²	ISO 179/1eA

Mechanical properties (TPE)	dry / cond	Unit	Test Standard
Ball indentation hardness	145 / 145	MPa	ISO 2039-1

Thermal properties	dry / cond	Unit	Test Standard
Glass transition temperature (10°C/min)	125 / -	°C	ISO 11357-1/-2
Temp. of deflection under load (1.80 MPa)	105 / -	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	115 / -	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	60 / -	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	60 / -	E-6/K	ISO 11359-1/-2
Burning Behav. at thickness h	V-2 / -	class	IEC 60695-11-10
Thickness tested	0.8 / -	mm	IEC 60695-11-10
Max. usage temperature (long term)	40 - 60	°C	ISO 2578
Max. usage temperature (short term)	100	°C	EMS

Electrical properties	dry / cond	Unit	Test Standard
Volume resistivity	1E12 / 1E12	Ohm*m	IEC 60093
Surface resistivity	- / 1E13	Ohm	IEC 60093
Electric strength	27 / 27	kV/mm	IEC 60243-1
Comparative tracking index	- / 600	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	7 / -	%	Sim. to ISO 62
Humidity absorption	2 / -	%	Sim. to ISO 62
Density	1180 / -	kg/m ³	ISO 1183

Rheo/Phys properties	dry / cond	Unit	Test Standard
Molding shrinkage (parallel)	0.3 / -	%	ISO 294-4, 2577
Molding shrinkage (normal)	0.5 / -	%	ISO 294-4, 2577

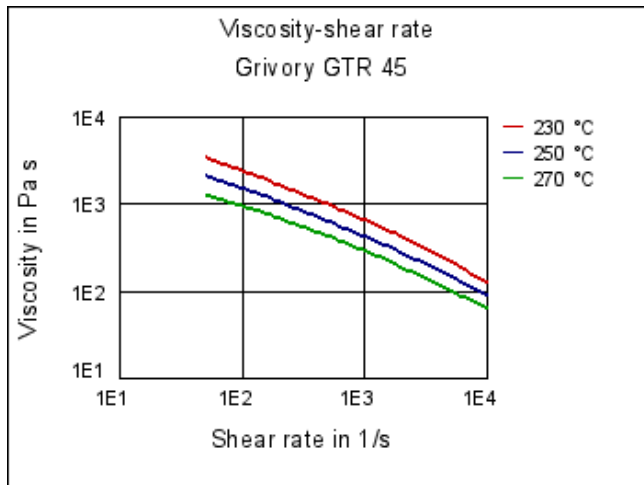
Diagrams

Grivory GTR 45

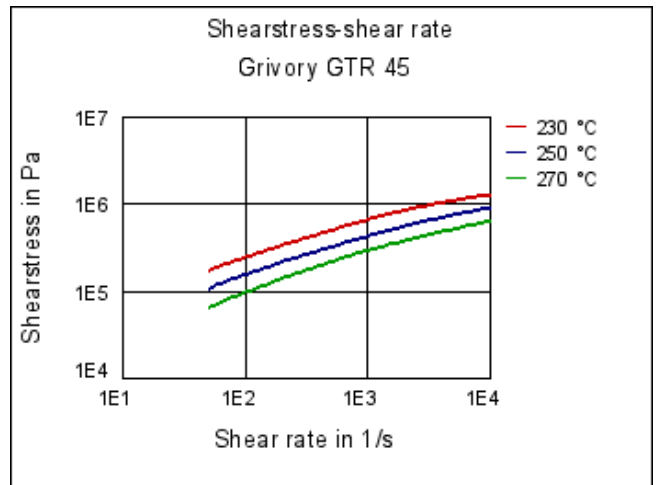
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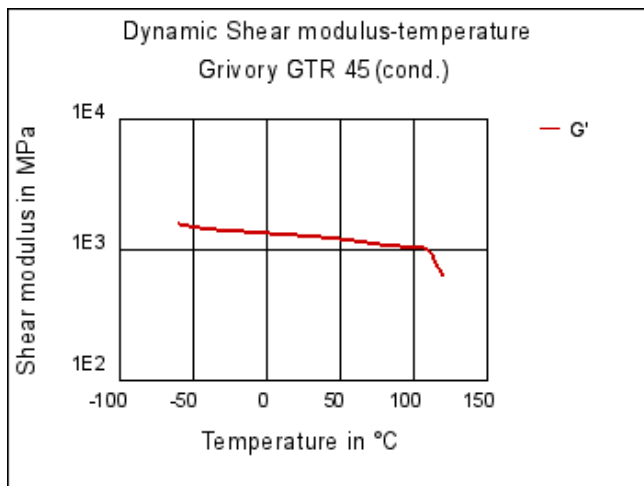
Viscosity-shear rate



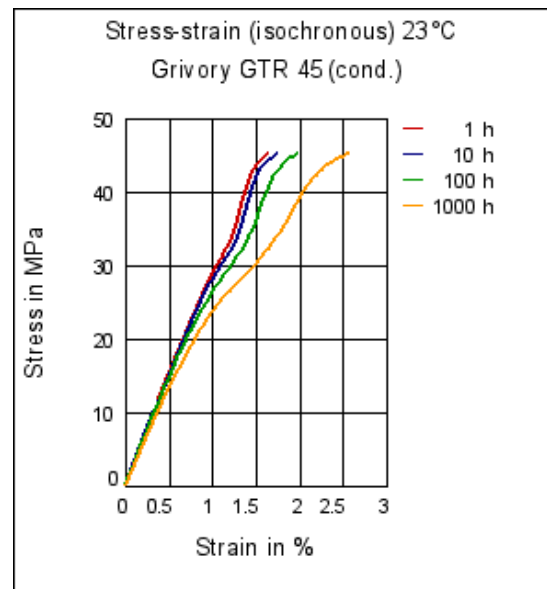
Shearstress-shear rate



Dynamic Shear modulus-temperature



Stress-strain (isochronous) 23 °C

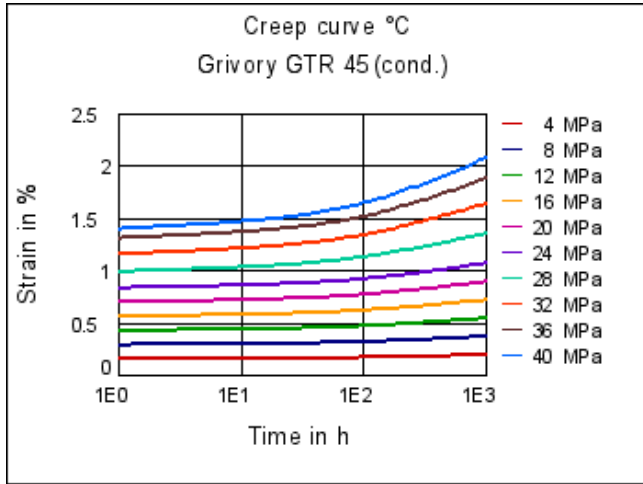


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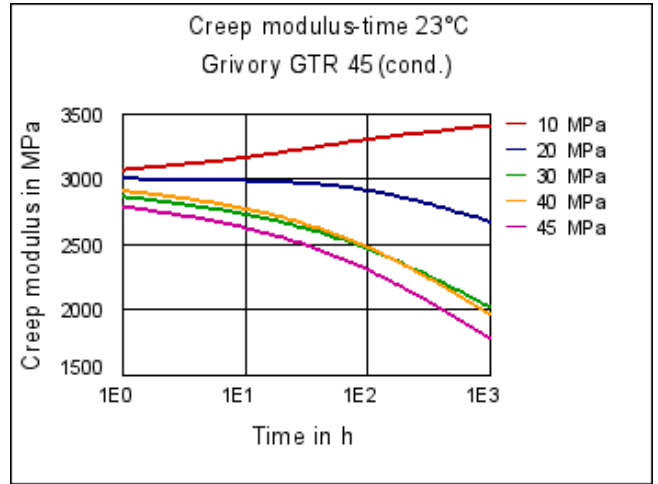
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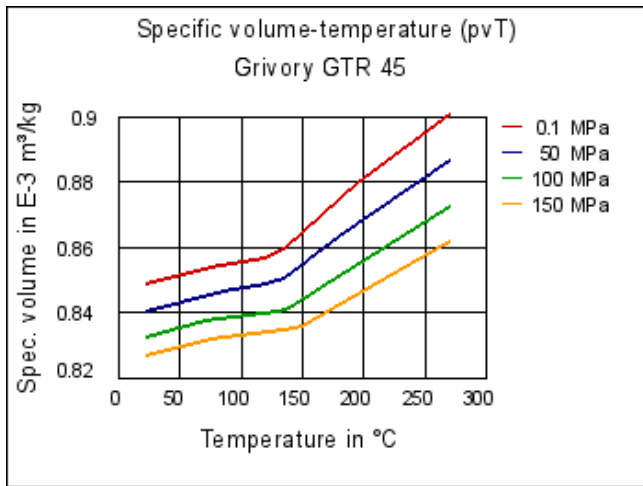
Creep curve °C



Creep modulus-time 23°C



Specific volume-temperature (pvT)



Characteristics

Processing

Injection Molding, Injection (stretch) blow molding

Delivery form

Granules

Special Characteristics

Transparent

Regional Availability

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

Industry & Consumer goods

Housewares

Packaging

Injectionstretchblowmoulded containers, Cosmetics / Personal care, Medical packaging

Burning Behaviour

UL V2

Food Contact

EU Requirements, FDA

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Product Attributes

Barrier Properties, Partially aromatic Polyamide

Biocompatibility

USP VI, ISO 10993

Automotive

Interior

Potable Water Contact

NSF 61

Electricals & Electronics

Electrical appliances
