

**Grivory GV-6H black**

PA\*-GF60

EMS-GRIVORY | a unit of EMS-CHEMIE AG

**Product Texts**

Product designation according to ISO 1874:

PA66+PA6I/X, MH, 14-220, GF60

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	<b>22000 / 21000</b>	MPa	ISO 527-1/-2
Stress at break	<b>260 / 240</b>	MPa	ISO 527-1/-2
Strain at break	<b>2 / 2</b>	%	ISO 527-1/-2
Charpy impact strength (+23°C)	<b>80 / 80</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (-30°C)	<b>80 / 80</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	<b>14 / 14</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (-30°C)	<b>13 / 13</b>	kJ/m <sup>2</sup>	ISO 179/1eA

Mechanical properties (TPE)	dry / cond	Unit	Test Standard
Ball indentation hardness	<b>315 / 290</b>	MPa	ISO 2039-1

Thermal properties	dry / cond	Unit	Test Standard
Melting temperature (10°C/min)	<b>260 / -</b>	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	<b>235 / -</b>	°C	ISO 75-1/-2
Temp. of deflection under load (8.00 MPa)	<b>175 / -</b>	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	<b>15 / -</b>	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	<b>90 / -</b>	E-6/K	ISO 11359-1/-2
Burning Behav. at thickness h	<b>HB / -</b>	class	IEC 60695-11-10
Thickness tested	<b>0.8 / -</b>	mm	IEC 60695-11-10
Max. usage temperature (long term)	<b>100 - 120</b>	°C	ISO 2578
Max. usage temperature (short term)	<b>220</b>	°C	EMS

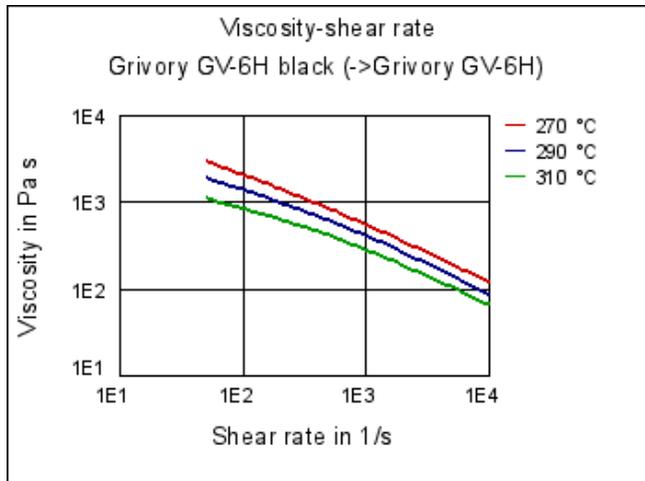
Electrical properties	dry / cond	Unit	Test Standard
Volume resistivity	<b>1E12 / 1E12</b>	Ohm*m	IEC 60093
Surface resistivity	<b>- / 1E13</b>	Ohm	IEC 60093
Electric strength	<b>33 / 33</b>	kV/mm	IEC 60243-1
Comparative tracking index	<b>- / 600</b>	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	<b>3.5 / -</b>	%	Sim. to ISO 62
Humidity absorption	<b>1.2 / -</b>	%	Sim. to ISO 62
Density	<b>1690 / -</b>	kg/m <sup>3</sup>	ISO 1183

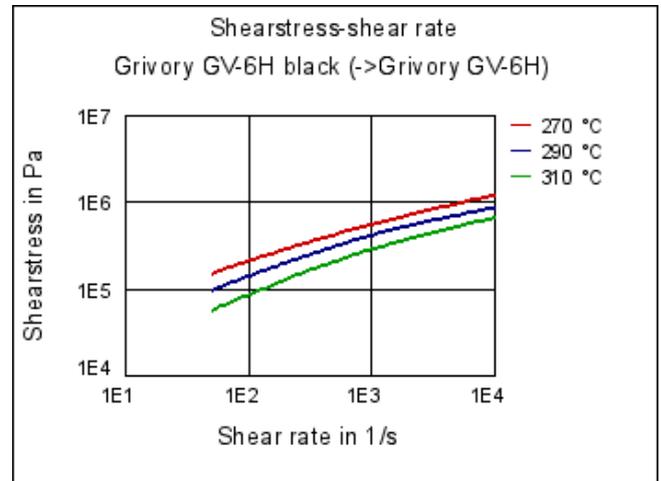
Rheo/Phys properties	dry / cond	Unit	Test Standard
Molding shrinkage (parallel)	<b>0.1 / -</b>	%	ISO 294-4, 2577
Molding shrinkage (normal)	<b>0.3 / -</b>	%	ISO 294-4, 2577

**Diagrams**

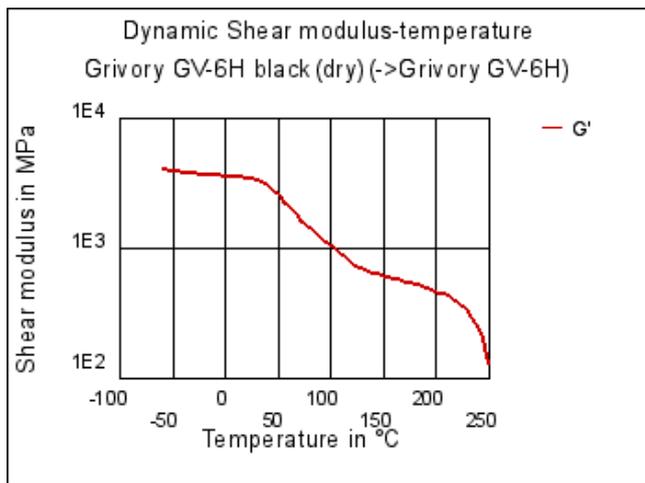

Viscosity-shear rate



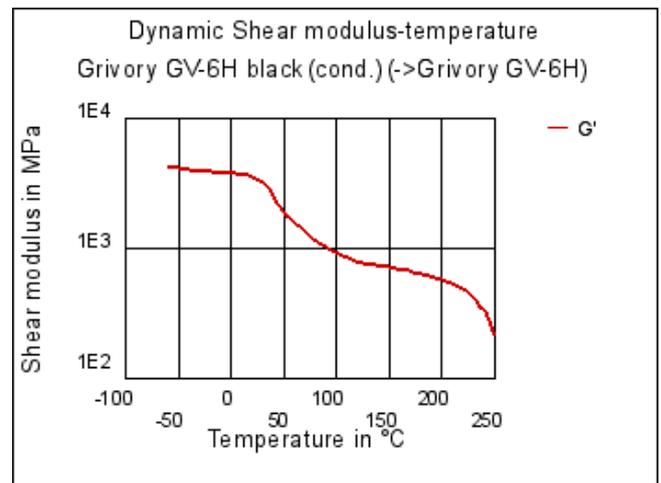
Shearstress-shear rate



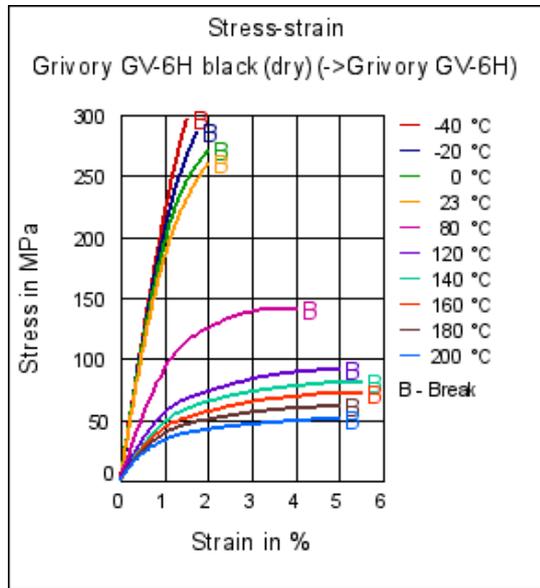
Dynamic Shear modulus-temperature



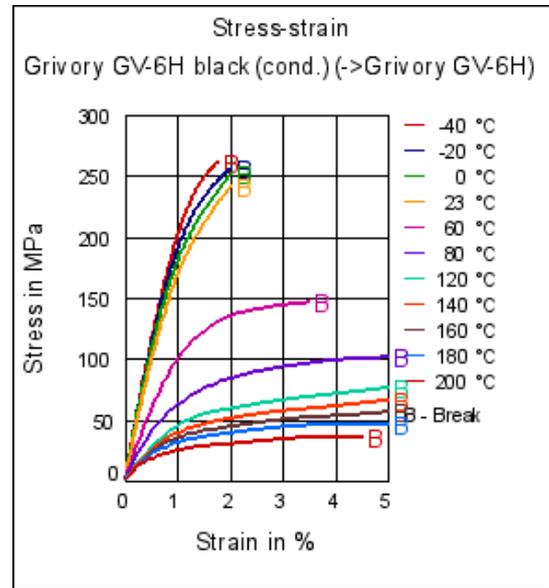
Dynamic Shear modulus-temperature



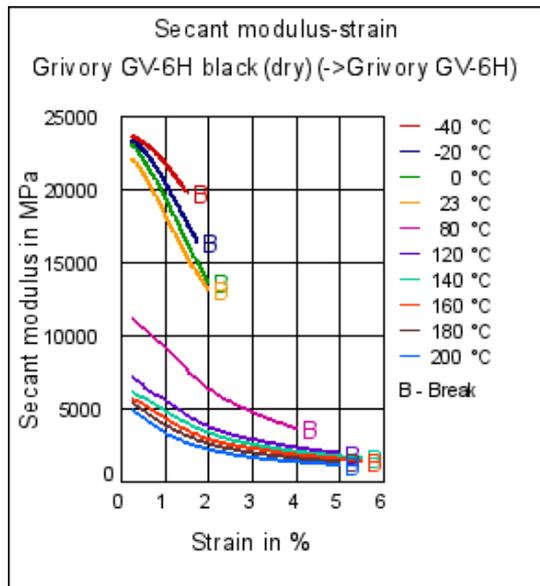
Stress-strain



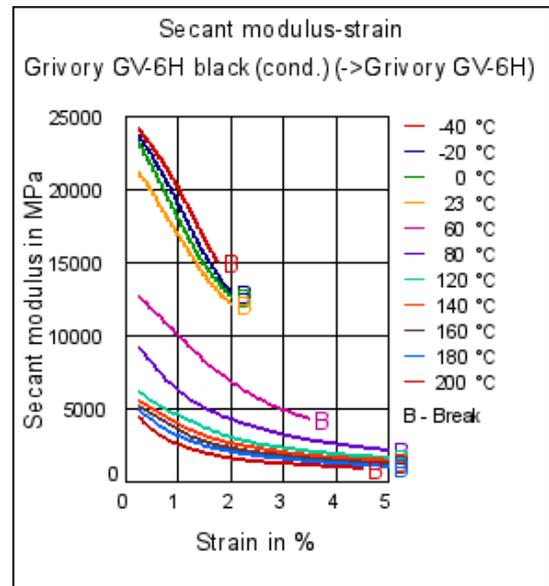
Stress-strain



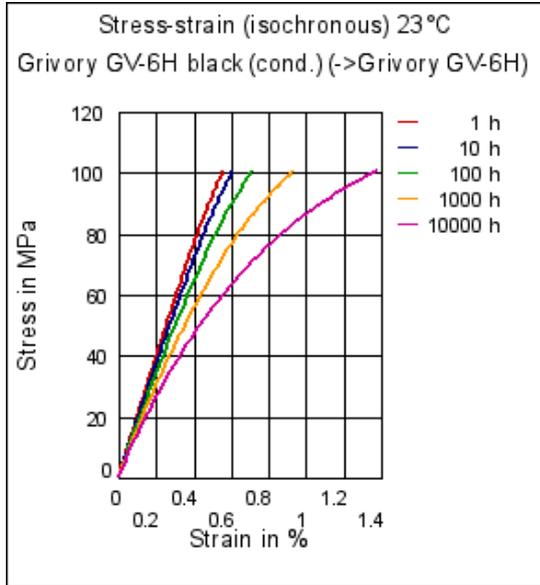
Secant modulus-strain



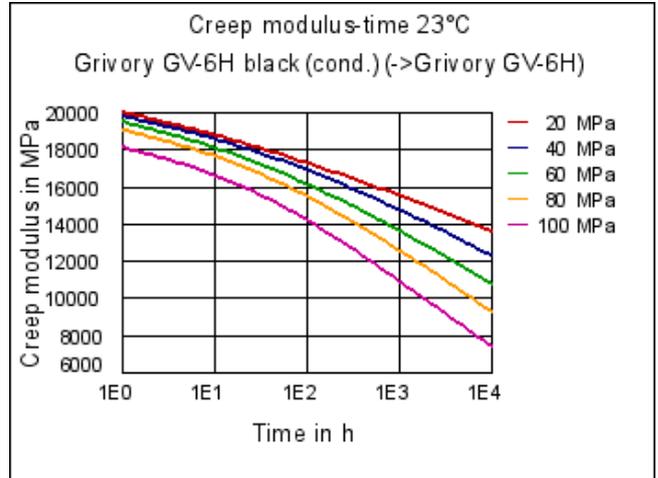
Secant modulus-strain



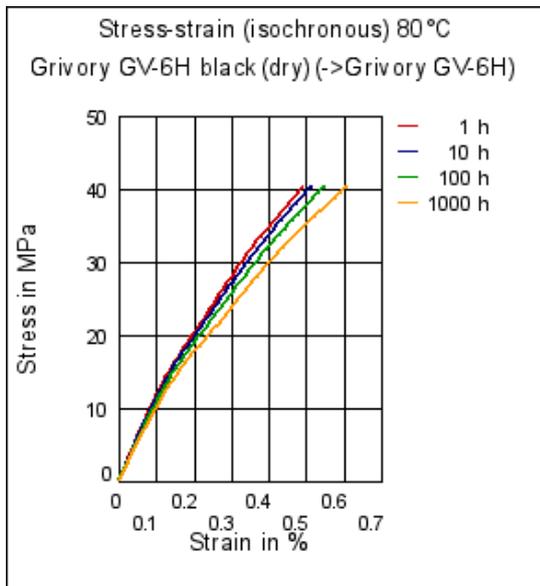
Stress-strain (isochronous) 23°C



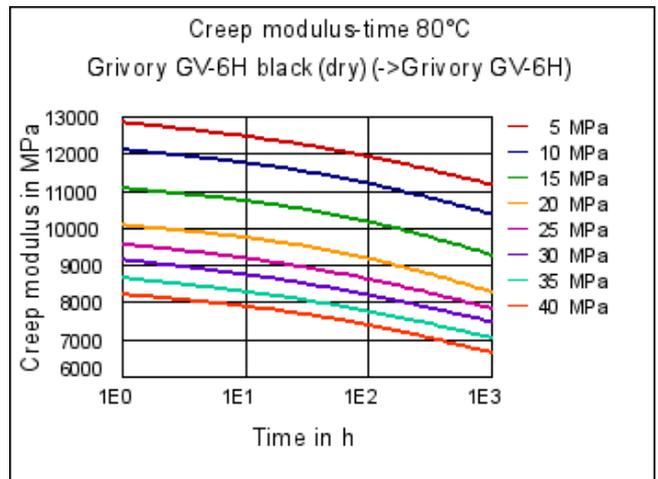
Creep modulus-time 23°C



Stress-strain (isochronous) 80°C



Creep modulus-time 80°C



Characteristics

Processing

Injection Molding

Delivery form

Granules

Regional Availability

North America, Europe, Asia Pacific, South and Central America,

Automotive

Air intake systems, Compressed air systems, Hydraulic systems, Automotive electr. and electronics, lighting, Powertrain and Chassis, Interior, Exterior

Electricals & Electronics

Electrical appliances, Electrical equipment, Connectors, Energy distribution, Lighting, Mobile phones and other portable devices



## Grivory GV-6H black

PA\*-GF60

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Near East/Africa

### Product Attributes

Bio based Polyamide, Partially aromatic Polyamide

### Industry & Consumer goods

Housewares, Hydraulics & Pneumatics, Mechanical Engineering,  
Power transmission, Sports & Leisure, Tools & Accessories

### Potable Water Contact

NSF 61

