

Grilon BRZ 340 H

PA6

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Product Texts

Product designation according to ISO 1874:

PA6-HI, GHR, 27-030 N

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	2800 / 700	MPa	ISO 527-1/-2
Yield stress	70 / 35	MPa	ISO 527-1/-2
Yield strain	4 / 15	%	ISO 527-1/-2
Nominal strain at break	40 / >50	%	ISO 527-1/-2
Stress at break	40 / 45	MPa	ISO 527-1/-2
Charpy impact strength (+23°C)	N / N	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	N / N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	15 / N	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	11 / 7	kJ/m ²	ISO 179/1eA

Mechanical properties (TPE)	dry / cond	Unit	Test Standard
Ball indentation hardness	130 / 45	MPa	ISO 2039-1

Thermal properties	dry / cond	Unit	Test Standard
Melting temperature (10°C/min)	222 / -	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	55 / -	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	130 / -	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	90 / -	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	120 / -	E-6/K	ISO 11359-1/-2
Burning Behav. at thickness h	HB / -	class	IEC 60695-11-10
Thickness tested	0.8 / -	mm	IEC 60695-11-10
Max. usage temperature (long term)	100 - 120	°C	ISO 2578
Max. usage temperature (short term)	180	°C	EMS

Electrical properties	dry / cond	Unit	Test Standard
Volume resistivity	1E12 / 1E11	Ohm*m	IEC 60093
Surface resistivity	- / 1E12	Ohm	IEC 60093
Electric strength	40 / 35	kV/mm	IEC 60243-1
Comparative tracking index	- / 600	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	9 / -	%	Sim. to ISO 62
Humidity absorption	3 / -	%	Sim. to ISO 62
Density	1100 / -	kg/m ³	ISO 1183

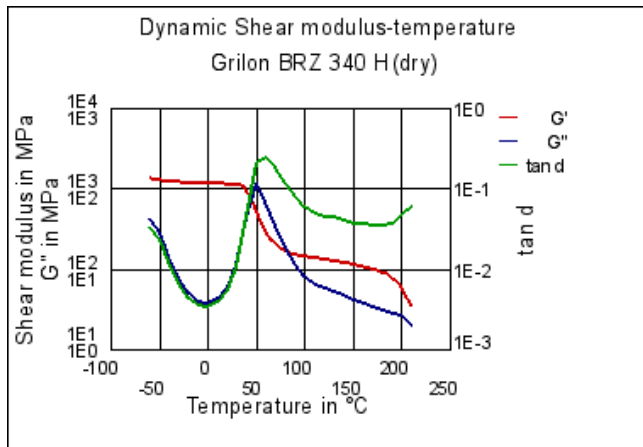
Diagrams

Grilon BRZ 340 H

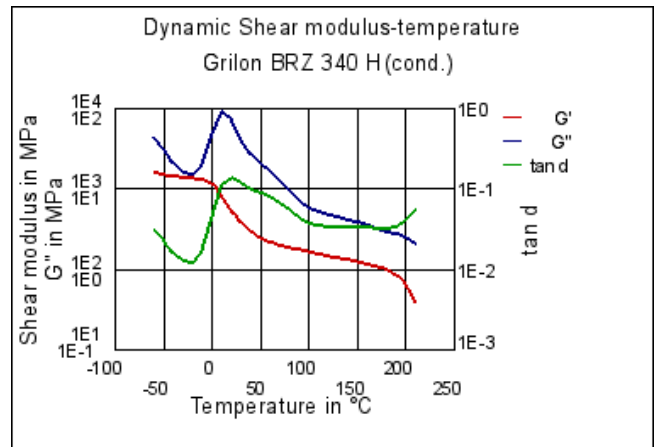
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Dynamic Shear modulus-temperature



Dynamic Shear modulus-temperature



Characteristics

Processing

Other Extrusion

Delivery form

Granules

Special Characteristics

High impact or impact modified

Regional Availability

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

Product Attributes

Flexible

Automotive

Air intake systems, Cooling and climate control

Electricals & Electronics

Cables & Tubes

Industry & Consumer goods

Hydraulics & Pneumatics, Mechanical Engineering, Power transmission

Chemical Media Resistance

Acids

- 😊 Acetic Acid (5% by mass) (23°C)
- 😊 Citric Acid solution (10% by mass) (23°C)
- 😊 Lactic Acid (10% by mass) (23°C)
- 🚫 Hydrochloric Acid (36% by mass) (23°C)
- 🚫 Nitric Acid (40% by mass) (23°C)
- 🚫 Sulfuric Acid (38% by mass) (23°C)
- 🚫 Sulfuric Acid (5% by mass) (23°C)
- 🚫 Chromic Acid solution (40% by mass) (23°C)

Bases

- 😊 Sodium Hydroxide solution (35% by mass) (23°C)
- 😊 Sodium Hydroxide solution (1% by mass) (23°C)
- 😊 Ammonium Hydroxide solution (10% by mass) (23°C)

Alcohols


- 😊 Isopropyl alcohol (23°C)

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 Methanol (23°C)

 Ethanol (23°C)


Hydrocarbons

 n-Hexane (23°C)


 Toluene (23°C)

 iso-Octane (23°C)

Ketones

 Acetone (23°C)

Ethers


 Diethyl ether (23°C)

Mineral oils


 SAE 10W40 multigrade motor oil (23°C)


 SAE 10W40 multigrade motor oil (130°C)


 SAE 80/90 hypoid-gear oil (130°C)


 Insulating Oil (23°C)


Standard Fuels


 ISO 1817 Liquid 1 (60°C)


 ISO 1817 Liquid 2 (60°C)


 ISO 1817 Liquid 3 (60°C)

 ISO 1817 Liquid 4 (60°C)

 Standard fuel without alcohol (pref. ISO 1817 Liquid C) (23°C)


 Standard fuel with alcohol (pref. ISO 1817 Liquid 4) (23°C)


 Diesel fuel (pref. ISO 1817 Liquid F) (23°C)


 Diesel fuel (pref. ISO 1817 Liquid F) (90°C)


 Diesel fuel (pref. ISO 1817 Liquid F) (>90°C)


Salt solutions

 Sodium Chloride solution (10% by mass) (23°C)

 Sodium Hypochlorite solution (10% by mass) (23°C)


 Sodium Carbonate solution (20% by mass) (23°C)

 Sodium Carbonate solution (2% by mass) (23°C)


 Zinc Chloride solution (50% by mass) (23°C)


Other


 Ethyl Acetate (23°C)


 Hydrogen peroxide (23°C)


 DOT No. 4 Brake fluid (130°C)


 Ethylene Glycol (50% by mass) in water (108°C)

 1% nonylphenoxy-polyethyleneoxy ethanol in water (23°C)

 50% Oleic acid + 50% Olive Oil (23°C)

 Water (23°C)

 Deionized water (90°C)

 Phenol solution (5% by mass) (23°C)