

**Grilon BM 17**

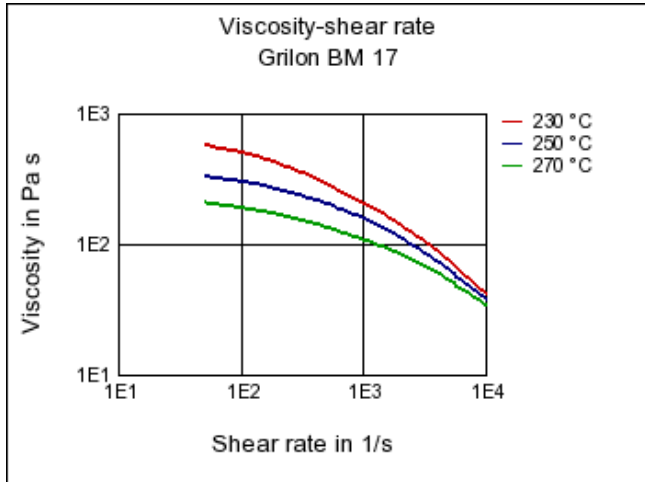
PA\*

EMS-GRIVORY | a unit of EMS-CHEMIE AG

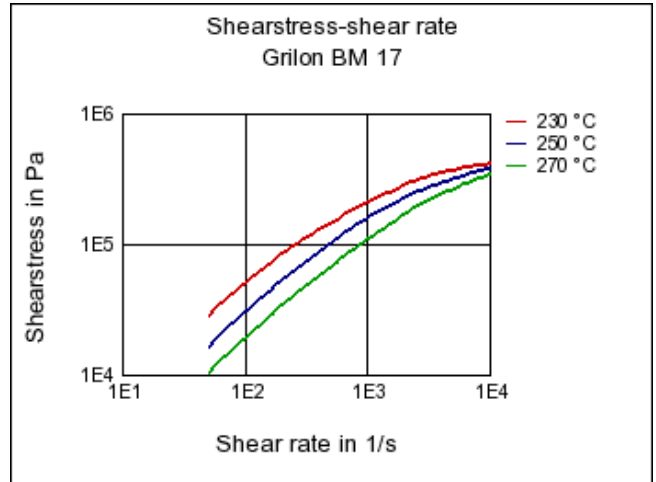
Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	- / 650	MPa	ISO 527-1/-2
Thermal properties	dry / cond	Unit	Test Standard
Melting temperature (10°C/min)	169 / -	°C	ISO 11357-1/-3
Other properties	dry / cond	Unit	Test Standard
Water absorption	10 / -	%	Sim. to ISO 62
Humidity absorption	3 / -	%	Sim. to ISO 62
Density	1090 / -	kg/m <sup>3</sup>	ISO 1183
Film Properties	dry / cond	Unit	Test Standard
Stress at yield (parallel)	25 / -	MPa	ISO 527-3
Stress at yield (normal)	25 / -	MPa	ISO 527-3
Strain at yield (parallel)	7 / -	%	ISO 527-3
Strain at yield (normal)	6 / -	%	ISO 527-3
Maximum strain (parallel)	400 / -	%	ISO 527-3
Maximum strain (normal)	400 / -	%	ISO 527-3
Dynamic coefficient of friction	0.8 / -	-	ISO 8295
Gloss, 60°	64 / -	-	ISO 2813
Haze	19 / -	-	ISO 14782
WVTR at 23°C/85%r.h.	15 / -	g/(m <sup>2</sup> *d)	DIS 15106-1/-2
Oxygen transmission rate at 23°C/0%r.h.	110 / -	cm <sup>3</sup> /(m <sup>2</sup> *d*bar)	DIS 15105-1/-2
Oxygen transmission rate at 23°C/85%r.h.	75 / -	cm <sup>3</sup> /(m <sup>2</sup> *d*bar)	DIS 15105-1/-2
Carbon Dioxide transm. rate at 23°C/0%r.h.	275 / -	cm <sup>3</sup> /(m <sup>2</sup> *d*bar)	DIS 15105-1/-2
Carbon Dioxide transm. rate at 23°C/85%r.h.	290 / -	cm <sup>3</sup> /(m <sup>2</sup> *d*bar)	DIS 15105-1/-2
Stress at break, parallel	70	MPa	ISO 527-3
Stress at break, normal	60	MPa	ISO 527-3
Rheo/Phys properties	dry / cond	Unit	Test Standard
Melt volume-flow rate	100 / -	cm <sup>3</sup> /10min	ISO 1133
Temperature	275 / -	°C	ISO 1133
Load	5 / -	kg	ISO 1133

**Diagrams**

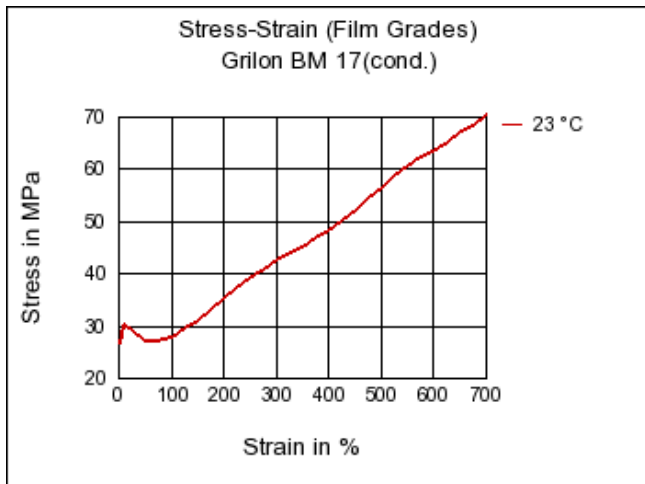
Viscosity-shear rate



Shearstress-shear rate



Stress-Strain (Film Grades)



Characteristic

Processing

Extrusion - cast film, Blown Film Extrusion, Other Extrusion

Special Characteristics



Transparent

Regional Availability

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

Chemical Media Resistance

Acids

-  Acetic Acid (5% by mass) (23°C)
-  Chromic Acid solution (40% by mass) (23°C)

Product Attributes







Barrier Properties, High viscosity, Co Polyamide

Packaging




Non oriented film, Oriented film, Paper coating

Food Contact




EU Requirements

-  Citric Acid solution (10% by mass) (23 °C)
-  Hydrochloric Acid (36% by mass) (23 °C)
-  Lactic Acid (10% 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)




#### Bases

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

#### Alcohols

-  Ethanol (23 °C)
-  Isopropyl alcohol (23 °C)
-  Methanol (23 °C)


#### Hydrocarbons

-  Toluene (23 °C)
-  iso-Octane (23 °C)
-  n-Hexane (23 °C)





#### Ketones

-  Acetone (23 °C)










#### Ethers

-  Diethyl ether (23 °C)




#### Mineral oils



-  Insulating Oil (23 °C)
-  SAE 10W40 multigrade motor oil (130 °C)
-  SAE 10W40 multigrade motor oil (23 °C)
-  SAE 80/90 hypoid-gear oil (130 °C)

#### Standard Fuels










-  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)
-  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 with alcohol (pref. ISO 1817 Liquid 4) (23 °C)
-  Standard fuel without alcohol (pref. ISO 1817 Liquid C) (23 °C)

#### Salt solutions

-  Sodium Carbonate solution (2% by mass) (23 °C)
-  Sodium Carbonate solution (20% by mass) (23 °C)
-  Sodium Chloride solution (10% by mass) (23 °C)

-  Sodium Hypochlorite solution (10% by mass) (23 °C)
-  Zinc Chloride solution (50% by mass) (23 °C)

**Other**

-  1% nonylphenoxy-polyethyleneoxy ethanol in water (23 °C)
-  50% Oleic acid + 50% Olive Oil (23 °C)
-  DOT No. 4 Brake fluid (130 °C)
-  Deionized water (90 °C)
-  Ethyl Acetate (23 °C)
-  Ethylene Glycol (50% by mass) in water (108 °C)
-  Hydrogen peroxide (23 °C)
-  Phenol solution (5% by mass) (23 °C)
-  Water (23 °C)