

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/m³	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/(m²*d)	DIS 15106-1/-2
Oxygen transmission rate at 23°C/0%r.h.	110 / -	cm ³ /(m ² *d*bar)	DIS 15105-1/-2
Oxygen transmission rate at 23°C/85%r.h.	75 / -	cm ³ /(m ² *d*bar)	DIS 15105-1/-2
Carbon Dioxide transm. rate at 23°C/0%r.h.	275 / -	cm ³ /(m ² *d*bar)	DIS 15105-1/-2
Carbon Dioxide transm. rate at 23°C/85%r.h.	290 / -	cm ³ /(m ² *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 ³ /10min	ISO 1133
Temperature	275 / -	°C	ISO 1133
Load	5 / -	kg	ISO 1133

Diagrams

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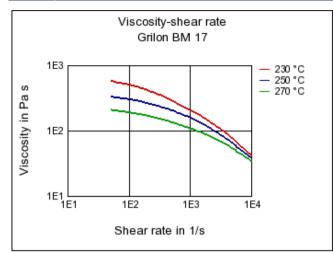
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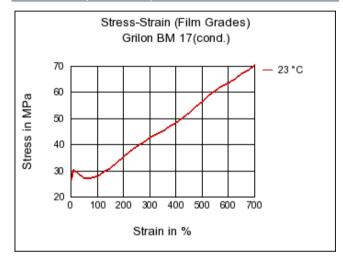
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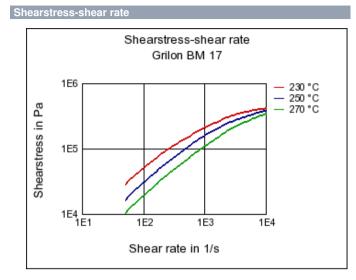
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Viscosity-shear rate



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

Product Attributes

Barrier Properties, High viscosity, Co Polyamide

Chemical Media Resistance

Acids

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

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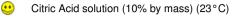
Packaging

Non oriented film, Oriented film, Paper coating

Food Contact

EU Requirements

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- 0 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) ٠
 - 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

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

Ketones

 \odot 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)
- ٠ SAE 80/90 hypoid-gear oil (130°C)

Standard Fuels

- ٠ Diesel fuel (pref. ISO 1817 Liquid F) (23°C)
- \odot Diesel fuel (pref. ISO 1817 Liquid F) (90°C)
- ٠ Diesel fuel (pref. ISO 1817 Liquid F) (>90°C)
- ٠ ISO 1817 Liquid 1 (60°C)
- \odot ISO 1817 Liquid 2 (60°C)
- ISO 1817 Liquid 3 (60°C)
- ٠ 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) ٠
- ٠ Sodium Carbonate solution (20% by mass) (23°C)
- •• Sodium Chloride solution (10% by mass) (23°C)

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- 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)
- ٠ 50% Oleic acid + 50% Olive Oil (23°C)
- ۳ DOT No. 4 Brake fluid (130°C)
- ••• Deionized water (90°C)
- ٠ Ethyl Acetate (23°C)
- ٠ Ethylene Glycol (50% by mass) in water (108°C)
- Ŏ Hydrogen peroxide (23°C)
- Phenol solution (5% by mass) (23°C)
- •• Water (23°C)

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