

| 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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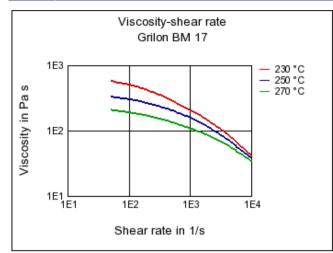
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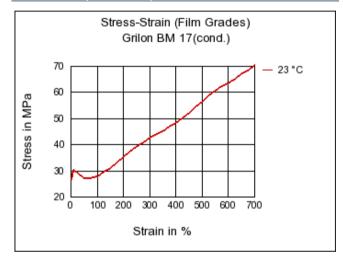
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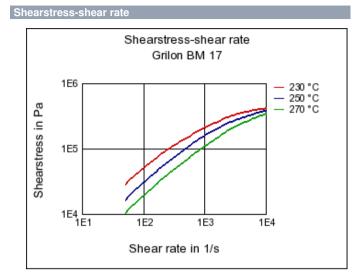
EMS-GRIVORY | a unit of EMS-CHEMIE AG

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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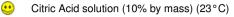
Packaging

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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