


**Technyl® C 218 V15**

PA6-GF15

Solvay Engineering Plastics

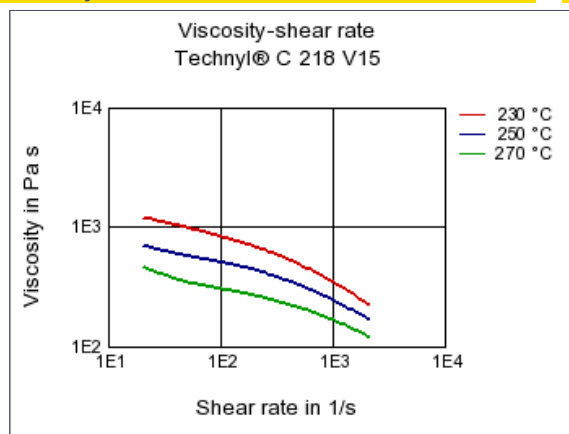
**Product Texts**

Polyamide 6, 15 % glass fibre reinforced, heat stabilised

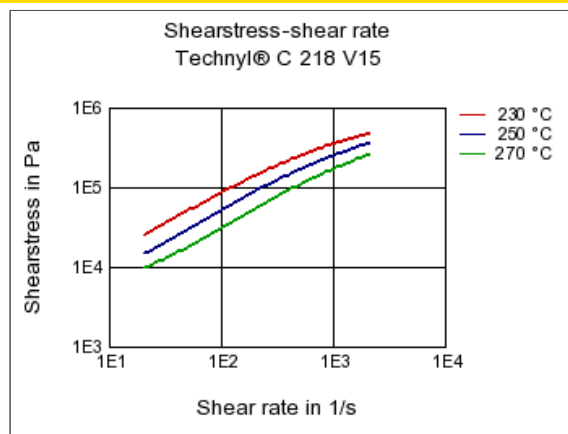
| <b>Mechanical properties</b>                | <b>dry / cond</b> | <b>Unit</b>       | <b>Test Standard</b> |
|---------------------------------------------|-------------------|-------------------|----------------------|
| <b>ISO Data</b>                             |                   |                   |                      |
| Tensile Modulus                             | 6100 / 2900       | MPa               | ISO 527-1/-2         |
| Stress at break                             | 120 / -           | MPa               | ISO 527-1/-2         |
| Strain at break                             | 4 / -             | %                 | ISO 527-1/-2         |
| Charpy impact strength (+23°C)              | 42 / -            | kJ/m <sup>2</sup> | ISO 179/1eU          |
| Charpy notched impact strength (+23°C)      | 5.5 / -           | kJ/m <sup>2</sup> | ISO 179/1eA          |
| <b>Thermal properties</b>                   |                   |                   |                      |
| <b>ISO Data</b>                             |                   |                   |                      |
| Melting temperature (10°C/min)              | 222 / *           | °C                | ISO 11357-1/-3       |
| Glass transition temperature, 10°C/min      | 55 / *            | °C                | ISO 11357-1/-2       |
| Temp. of deflection under load (1.80 MPa)   | 180 / *           | °C                | ISO 75-1/-2          |
| Temp. of deflection under load (0.45 MPa)   | 205 / *           | °C                | ISO 75-1/-2          |
| Coeff. of linear therm. expansion, parallel | 42 / *            | E-6/K             | ISO 11359-1/-2       |
| Burning behav. at thickness h               | HB / *            | class             | IEC 60695-11-10      |
| Thickness tested                            | 1.6 / *           | mm                | IEC 60695-11-10      |
| <b>Electrical properties</b>                |                   |                   |                      |
| <b>ISO Data</b>                             |                   |                   |                      |
| Relative permittivity, 1MHz                 | 3.8 / 4.5         | -                 | IEC 60250            |
| Dissipation factor, 1MHz                    | 200 / -           | E-4               | IEC 60250            |
| Volume resistivity                          | 1E13 / 1E9        | Ohm*m             | IEC 60093            |
| Surface resistivity                         | * / 1E11          | Ohm               | IEC 60093            |
| Electric strength                           | - / 22            | kV/mm             | IEC 60243-1          |
| Comparative tracking index                  | 475 / -           | -                 | IEC 60112            |
| <b>Other properties</b>                     |                   |                   |                      |
| <b>ISO Data</b>                             |                   |                   |                      |
| Humidity absorption                         | 2.55 / *          | %                 | Sim. to ISO 62       |
| Density                                     | 1220 / -          | kg/m <sup>3</sup> | ISO 1183             |

## Diagrams

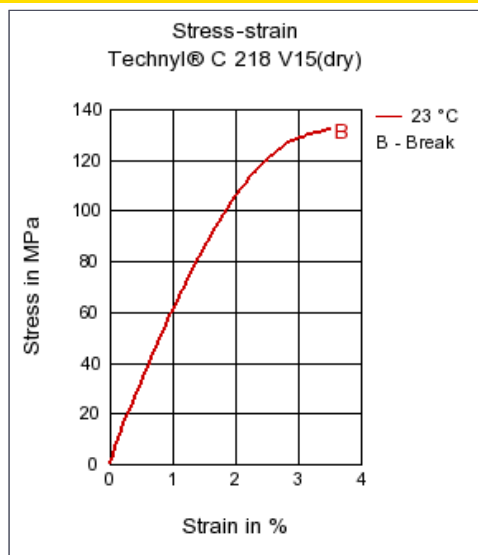
## Viscosity-shear rate



## Shearstress-shear rate



## Stress-strain



## Characteristics

## Processing

Injection Molding

## Special Characteristics

Heat stabilized or stable to heat

## Other text information

## Injection Molding

## PROCESSING

Melt temperature: 225°C

Mold temperature: 80°C

## 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)
-  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)

**Standard Fuels**

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

**Salt solutions**

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

**Other**

-  Ethylene Glycol (50% by mass) in water (108°C)
-  50% Oleic acid + 50% Olive Oil (23°C)
-  Water (23°C)
-  Deionized water (90°C)