


Technyl® C 216 V15

PA6-GF15

Solvay Engineering Plastics

Product Texts

Polyamide 6, 15 % glass fibre reinforced

Mechanical properties

dry / cond

Unit

Test Standard

ISO Data

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/m²

ISO 179/1eU

Charpy notched impact strength (+23°C)

5.5 / -

kJ/m²

ISO 179/1eA

Thermal properties

dry / cond

Unit

Test Standard

ISO Data

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

Electrical properties

dry / cond

Unit

Test Standard

ISO Data

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

Other properties

dry / cond

Unit

Test Standard

ISO Data

Humidity absorption

1.15 / *

%

Sim. to ISO 62

Density

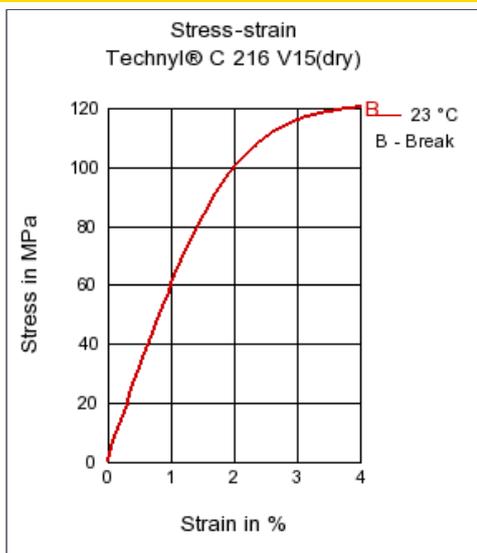
1220 / -

kg/m³

ISO 1183

Diagrams

Stress-strain



Characteristics

Processing

Injection Molding

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 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)