


Technyl® C 216 V40

PA6-GF40

Solvay Engineering Plastics

Product Texts

Polyamide 6, 40 % glass fibre reinforced

Mechanical properties

dry / cond

Unit

Test Standard

ISO Data

Tensile Modulus

13100 / 7300

MPa

ISO 527-1/-2

Stress at break

215 / -

MPa

ISO 527-1/-2

Strain at break

2.3 / -

%

ISO 527-1/-2

Charpy impact strength (+23°C)

107 / -

kJ/m²

ISO 179/1eU

Charpy notched impact strength (+23°C)

18 / -

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)

214 / *

°C

ISO 75-1/-2

Temp. of deflection under load (0.45 MPa)

220 / *

°C

ISO 75-1/-2

Coeff. of linear therm. expansion, parallel

26 / *

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

1.8 / *

%

Sim. to ISO 62

Density

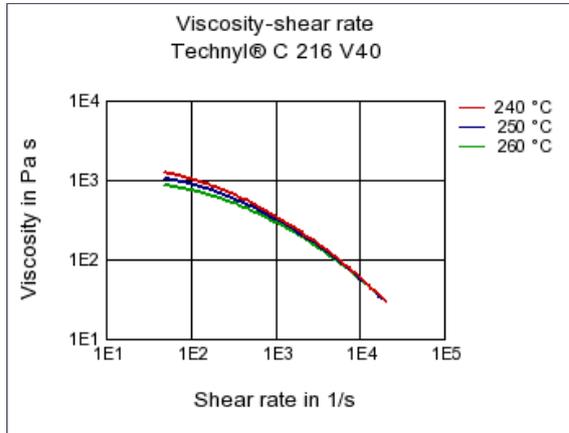
1450 / -

kg/m³

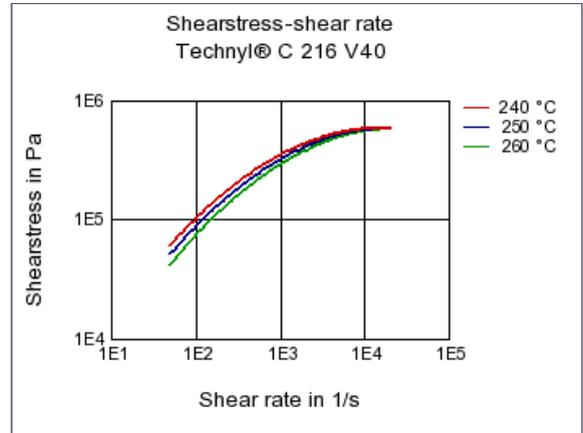
ISO 1183

Diagrams

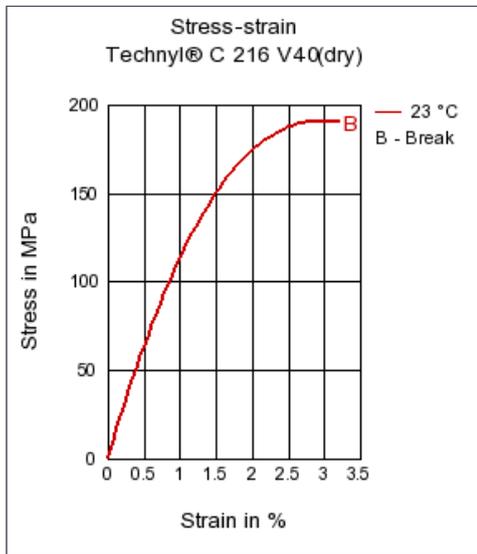
Viscosity-shear rate



Shearstress-shear rate



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)