



TECHNYL C 218 V30 BLACK

Description

TECHNYL® C 218 V30 Black is a polyamide 6, heat stabilized, reinforced with 30% of glass fiber, for injection moulding. This product is available in black color.

Key Properties

Mechanical performance
Heat stabilised

Benefits

The product offers an excellent combination between thermal and mechanical properties.

Applications

It is used in a wide variety of industries.

Properties

Typical values of properties are for natural grades

	Standards	Unit	Values	
			d.a.m.	Cond.
Physical				
Water absorption(24h at 23°C)	ISO 62	%	1,05	
Density	ISO 1183/A	g/cm3	1,36	
Molding shrinkage Parallel	RHODIA	%	0,30	
Molding shrinkage normal or perpendicular	RHODIA	%	0,70	
Molding Shrinkage Isotropy	RHODIA		0,43	
Mechanical				
Tensile Modulus	ISO 527 Type 1A	MPa	9600	6200
Tensile strength at break	ISO 527 Type 1A	MPa	190	110
	ASTM D-638	MPa	170	
Elongation at break	ISO 527 Type 1A	%	3,20	4,50
	ASTM D-638	%	3,50	
Flexural modulus	ISO 178	MPa	8400	4900
	ASTM D-790	MPa	8900	
Flexural maximum stress	ASTM D-790	MPa	255	
Charpy notched impact strength (23 °C)	ISO 179/1eA	kJ/m2	15	31,5
Charpy unnotched impact strength (23 °C)	ISO 179/1eU	kJ/m2	92	105
Izod notched impact strength (23 °C)	ISO 180/1A	kJ/m2	14	24
	ASTM D256	kJ/m2	125	
Flammability				
Flammability (Thickness: 0,4 - 3,2 mm)	ISO 1210 / UL94		HB	
Glow Wire Flammability Index (Thickness: 1,6 - 3,2 mm)	ISO 60695-2-12	°C	650	
Limit Oxygen Index	ISO 4589		23	
Thermal				
Melting Temperature	ISO 11357	°C	222	
Heat deflection temperature (1,8 MPa)	ISO 75/Af	°C	205	
Heat deflection temperature (1,82 MPa)	ASTM D-648	°C	205	
Coef of Linear thermal expansion normal or perpendicular (23°C to 85°C)	ISO 11359	E-5/°C	3,2	

	Standards	Unit	Values	
			d.a.m.	Cond.
Electrical				
Comparative tracking index (Sol A)	IEC 60112	V	600	600
Comparative tracking index (Sol B)	IEC 60112	V	475	
Dielectric strength	IEC 60243	kV/mm		22
Dissipation factor	IEC 60250		0,020	0,090
Relative permittivity	IEC 60250		3,80	4,50
Surface resistivity	IEC 60093	Ohm	1E 13	1E 11
Volume resistivity	IEC 60093	Ohm/cm	1E 15	1E 11

Specific

Identification code

PA6-GF30

d.a.m. = dry as moulded

Cond = conditioned

Disclaimer

The information contained in this document is given in good faith based on our current knowledge. It is only an indication and it is in no way binding. This information must on no account be used as a substitute for necessary prior tests which alone can ensure that a product is suitable for a given use. ANY WARRANTY OF PRODUCT PERFORMANCE, MERCHANDABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS EXPRESSLY EXCLUDED. Users are responsible for ensuring compliance with local legislation and for obtaining the necessary certifications and authorizations. Users are requested to check that they are in possession of the latest version of this document, and Solvay is at their disposal to supply any additional information.

Processing Guide

The material is supplied in airtight bags, ready for use. In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment.

Recommended Maximum water content: 0,2 %

Drying conditions: 80 °C

Recommended moulding conditions

Barrel Temperatures:

- feed zone	230 - 235 °C
- compression zone	235 - 245 °C
- mixing zone	245 - 250 °C
Mould temperatures:	70 - 100 °C

Steel advice for tools For reinforced polyamide (glass fibre, glass sphere, mineral fibre...), Solvay recommends the use of steel with a high content of Carbon and purified for polishing to avoid or limit the abrasion. For example: Z38CDV5W or Z160CDV12.

Safety information

Detailed information regarding safety are available on the safety data sheet (SDS).
SDS is sent with the first material order, or available by contacting our customer services

Regulations compliance

Grades produced or imported in Europe comply with directive 453/2010/EC, which amends REACH directive 1907/2006/EC

This grade complies with RoHS directive 2002/95/EC

Unless specified, this grade is not suitable for food contact, medical devices or toy applications

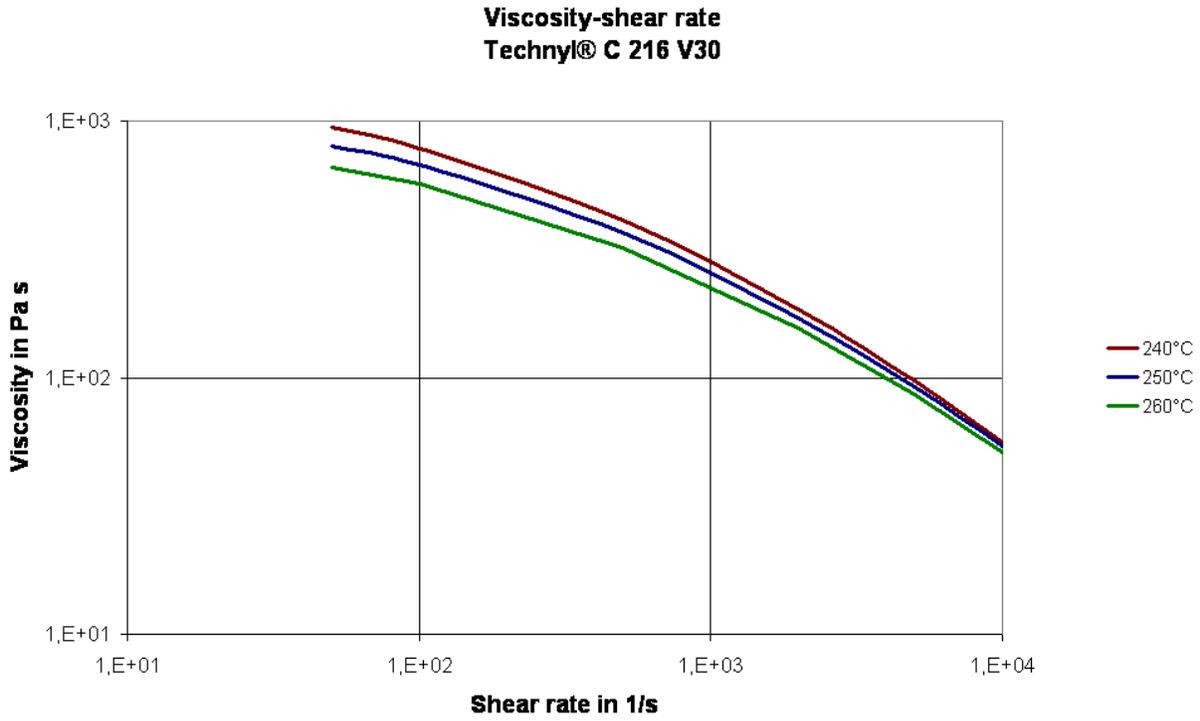
Customer services

Our customer services are not only concerned with manufacturing and supply of Engineering Plastics products. We are available to assist our customers in finding technical solutions that meet their requirements. Specific support is in particular offered on:

- Material selection
- Material testing
- Parts design advice, training for design engineers
- Part testing
- Processing through different technologies
- Assembly and post-processing technology expertise
- Parts optimization through Computer Aided Design

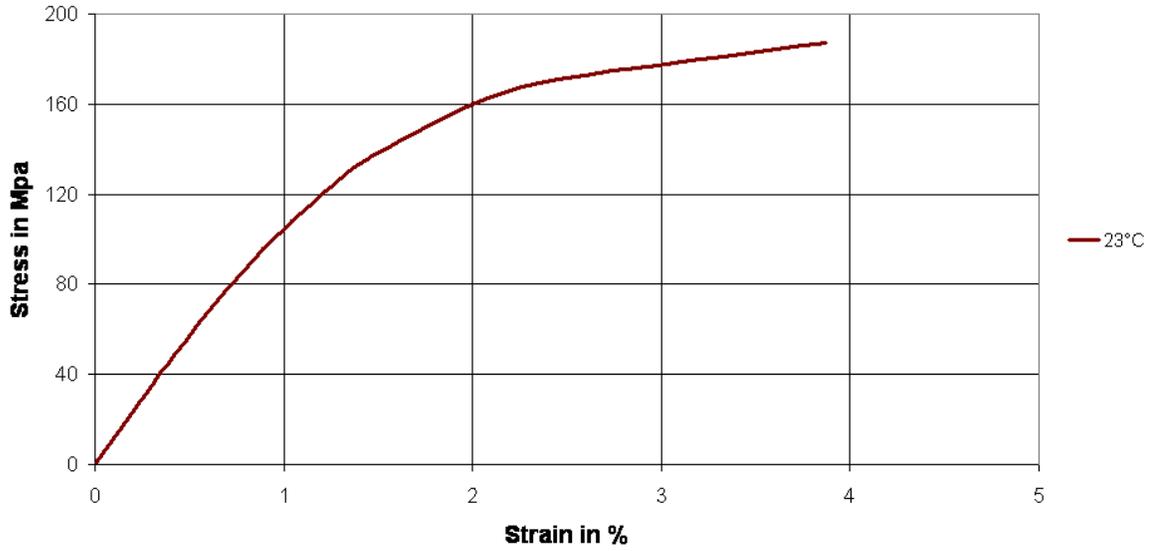
You can find more information on Solvay Product range by on Technyl.com and the link to the product finder and brochures at the following address:
<http://www.technyl.com/en/download/brochures/index.html>

— Viscosity-shear rate



Stress-strain

Stress-Strain (dry)
Technyl® C 218 V30



Stress-Strain (cond)
Technyl® C 218 V30

