



TECHNYL A 216 NAT FA & BLACK FA

Description

TECHNYL A 216 NATURAL FA and BLACK FA are unreinforced polyamide 66, medium viscosity, for injection molding. This product is available in natural and black colours.

Key Properties

Chemical resistance
Good thermal properties

Benefits

This grade offers all of the primary properties of unreinforced polyamide 66 such as: thermal and mechanical properties, impact resistance, abrasion and chemical resistance.

Applications

It is designed to be used in food contact applications specifically for cooking utensils.

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	%	1,30	
Density	ISO 1183/A	g/cm3	1,14	
Molding shrinkage Parallel	RHODIA	%	1,90	
Molding shrinkage normal or perpendicular	RHODIA	%	1,90	
Molding Shrinkage Isotropy	RHODIA		1	
Mechanical				
Tensile Modulus	ISO 527 Type 1A	MPa	3000	1500
Tensile strength at yield	ISO 527 Type 1A	MPa	81	60
Tensile strength at break	ISO 527 Type 1A	MPa	80	65
Elongation at yield	ISO 527 Type 1A	%	4,20	30
Elongation at break	ISO 527 Type 1A	%	30	
Flexural modulus	ISO 178	MPa	2900	1300
Flexural maximum stress	ISO 178	MPa	120	50
Charpy notched impact strength (23 °C)	ISO 179/1eA	kJ/m2	4,5	14
Charpy unnotched impact strength (23 °C)	ISO 179/1eU	kJ/m2	NB	
Izod notched impact strength (23 °C)	ISO 180/1A	kJ/m2	4	12
Flammability				
Flammability (Thickness: 0,8 mm)	ISO 1210 / UL94		V2	
Flammability (Thickness: 1,6 mm)	ISO 1210 / UL94		V2	
Glow Wire Flammability Index (Thickness: 0,8 mm)	ISO 60695-2-12	°C	650	
Glow Wire Flammability Index (Thickness: 1,6 mm)	ISO 60695-2-12	°C	650	
Limit Oxygen Index	ISO 4589		26,5	
Thermal				
Melting Temperature	ISO 11357	°C	263	
Heat deflection temperature (1,8 MPa)	ISO 75/Af	°C	75	
Coef of Linear thermal expansion normal or perpendicular (23°C to 85°C)		E-5/°C	2,5	
Coef of Linear thermal expansion parallel (23°C to 85°C)	ISO 11359	E-5/°C	7	

	Standards	Unit	Values	
			d.a.m.	Cond.
Electrical				
Comparative tracking index (Sol A)	IEC 60112	V	600	575
Comparative tracking index (Sol B)	IEC 60112	V	525	
Dielectric strength	IEC 60243	kV/mm	30	26
Dissipation factor	IEC 60250		0,030	0,080
Relative permittivity	IEC 60250		2,90	3,20
Surface resistivity	IEC 60093	Ohm	1E 15	1E 13
Volume resistivity	IEC 60093	Ohm/cm	4E 15	1E 14
Specific				
Identification code			PA66-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 265 - 275 °C
- compression zone 270 - 280 °C
- mixing zone 280 - 285 °C

Mould temperatures: 60 - 80 °C

Steel advice for tools For unfilled polyamide, Solvay recommends the use of high alloy steel with a weak chromium content. For example: 35NC6 or 35CD4.

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

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/Rhodia Product range on our internet product finder at the following address:

http://www.rhodia.com/en/markets_and_products/product_finder

or

<http://www.solvay.com/en/markets-and-products/featured-products/technyl.html>