



TECHNYL B 216 NATURAL D

Description

TECHNYL® B 216 Natural D is an unreinforced copolyamide 66/6, medium viscosity, for injection moulding.
This product is available in natural.

Key Properties

Good surface aspect
Good thermal properties

Benefits

This grade offers an excellent combination between impact resistance, rigidity, thermal resistance and surface appearance.

Applications

It is used in a wide variety of industries (electrical, automotive). This grade is particularly suitable for moulding perfume bottles which require a good scratch resistance.

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	%	1,60	
Density	ISO 1183/A	g/cm3	1,14	
Molding shrinkage Parallel	RHODIA	%	1,40	
Molding shrinkage normal or perpendicular	RHODIA	%	1,40	
Molding Shrinkage Isotropy	RHODIA		1	
Mechanical				
Tensile Modulus	ISO 527 Type 1A	MPa	3000	1100
Tensile strength at yield	ISO 527 Type 1A	MPa	85	50
Tensile strength at break	ISO 527 Type 1A	MPa	75	60
Elongation at yield	ISO 527 Type 1A	%	3,60	25
Elongation at break	ISO 527 Type 1A	%	30	100
Flexural modulus	ISO 178	MPa	3000	1200
Flexural maximum stress	ISO 178	MPa	125	50
Charpy notched impact strength	ISO 179/1eA	kJ/m2	5	16
Charpy unnotched impact strength	ISO 179/1eU	kJ/m2	NB	NB
Izod notched impact strength	ISO 180/1A	kJ/m2	5	16
Flammability				
Flammability (Thickness: 1,6 mm)	ISO 1210 / UL94		HB	
Flammability (Thickness: 3,2 mm)	ISO 1210 / UL94		V2	
Limit Oxygen Index	ISO 4589		23,5	
Thermal				
Melting Temperature	ISO 11357	°C	242	
Heat deflection temperature (1,8 MPa)	ISO 75/Af	°C	67	
Coef of Linear thermal expansion normal or perpendicular (23°C to 85°C)	ISO 11359	E-5/°C	7	
Electrical				
Comparative tracking index (Sol A)	IEC 60112	V	600	600
Comparative tracking index (Sol B)	IEC 60112	V	575	
Dielectric strength	IEC 60243	kV/mm	25	24
Dissipation factor	IEC 60250		0,030	0,100
Relative permittivity	IEC 60250		3	3,20
Surface resistivity	IEC 60093	Ohm	1E 14	1E 13
Volume resistivity	IEC 60093	Ohm/cm	1E 15	1E 13

	Standards	Unit	Values	
			d.a.m.	Cond.
Specific				
Identification code			PA66/6	

d.a.m. = dry as moulded

Cond = conditioned

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 250 - 260 °C
- compression zone 255 - 265 °C
- mixing zone 265 - 275 °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.

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.

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>