



TECHNYL B 230 NATURAL

Description

TECHNYL® B 230 Natural is an unfilled copolyamide 6.6/6, impact modified, for injection molding.
The product is available in natural color.

Key Properties

Medium impact
High flexibility
Good surface aspect

Benefits

This product offers an excellent notched impact resistance, even at low temperature.

Applications

The product is suitable for sport and leisure applications, such as for shoe soles, ski components, ski or surf bindings.

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	%	1,35	
Density	ISO 1183/A	g/cm3	1,09	
Molding shrinkage Parallel	RHODIA	%	2,20	
Molding shrinkage normal or perpendicular	RHODIA	%	2,05	
Molding Shrinkage Isotropy	RHODIA		1,07	
Mechanical				
Tensile Modulus	ISO 527 Type 1A	MPa	2300	900
Tensile strength at yield	ISO 527 Type 1A	MPa	60	45
	ASTM D-638	MPa	65	
Tensile strength at break	ISO 527 Type 1A	MPa	50	40
Elongation at yield	ISO 527 Type 1A	%	5	12
Elongation at break	ISO 527 Type 1A	%	50	250
	ASTM D-638	%	70	
Flexural modulus	ISO 178	MPa	2000	700
	ASTM D-790	MPa	2400	
Flexural maximum stress	ISO 178	MPa	80	27
	ASTM D-790	MPa	85	
Charpy notched impact strength (23 °C)	ISO 179/1eA	kJ/m2	8	30
Charpy unnotched impact strength (23 °C)	ISO 179/1eU	kJ/m2	NB	
Izod notched impact strength (23 °C)	ISO 180/1A	kJ/m2	7	18
	ASTM D256	J/m	140	
Flammability				
Flammability (Thickness: 1,6 mm)	ISO 1210 / UL94		HB	
Limit Oxygen Index	ISO 4589		21	
Thermal				
Melting Temperature	ISO 11357	°C	242	
Heat deflection temperature (1,8 MPa)	ISO 75/Af	°C	62	
Heat deflection temperature (1,82 MPa)	ASTM D-648	°C	70	
Heat deflection temperature (0,45 MPa)	ASTM D-648	°C	185	
Coef of Linear thermal expansion normal or perpendicular (23°C to 85°C)	ISO 11359	E-5/°C	7	
	ASTM D-696	E-5/°C	7	

	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	20	16
Dissipation factor	IEC 60250		0,020	0,070
Surface resistivity	IEC 60093	Ohm	5E 14	1E 12
Volume resistivity	IEC 60093	Ohm/cm	1E 14	1E 12

Specific

Identification code

PA66/6

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 245 - 255 °C

- compression zone 255 - 265 °C

- mixing zone 265 - 275 °C

Mould temperatures: 60 - 90 °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

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

Customer services

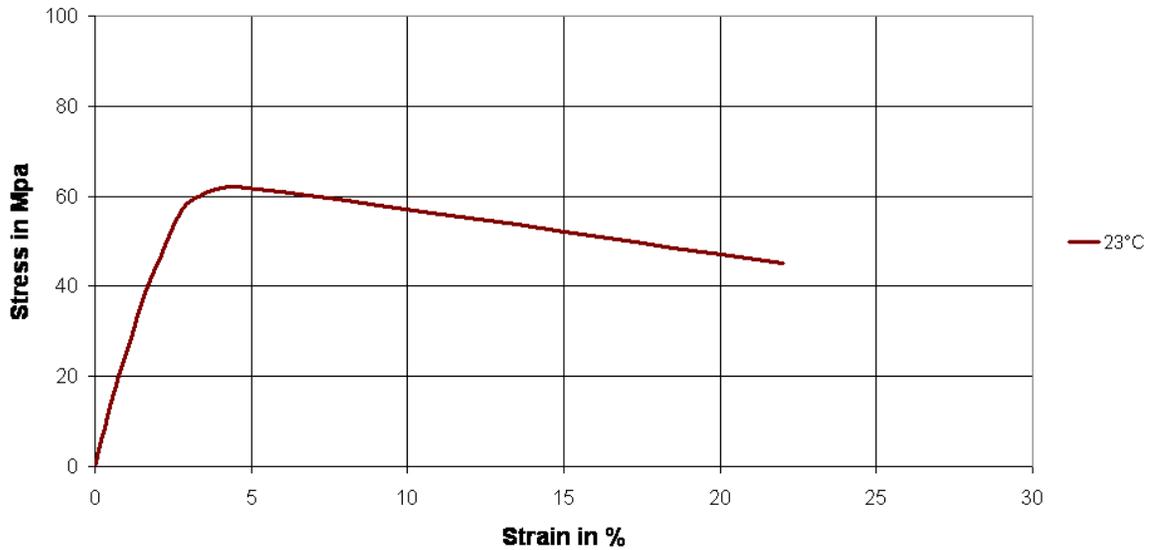
Our customer services are not only concerned with manufacturing and supply of Engineering Plastics products. We are available to assist our customers in finding technical solutions that meet their requirements. Specific support is in particular offered on:

- 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>

Stress-strain

**Stress-Strain (dry)
Technyl® B 230**



Viscosity-shear rate

**Viscosity-shear rate
Technyl® B 230**

