



TECHNYL 1021ST BRIGHT

Description

TECHNYL® 1021ST BRIGHT is a Polyamide 6, unfilled, super tough impact modified, for injection moulding.

This product is available in bright (natural).

Benefits

The grade offers the highest level impact strength and balanced mechanical properties.

Applications

It is suitable for all sectors industries such as:

- Bowling pin, Brake drum, Inline skate part

Key Properties

Very High impact
Mechanical performance

Regional Availability

Asia / Pacific

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	%	1,20	
Density	ISO 1183/A	g/cm3	1,06	
Mechanical				
Tensile strength at yield	ASTM D-638	MPa	50	
Elongation at break	ASTM D-638	%	200	
Flexural modulus	ASTM D-790	MPa	1900	
Flexural maximum stress	ASTM D-790	MPa	65	
Izod notched impact strength	ASTM D256	J/m	1.100	
Flammability				
Flammability	ISO 1210 / UL94		HB	
Thermal				
Melting Temperature	ISO 11357	°C	222	
Heat deflection temperature (0,45 MPa)	ASTM D-648	°C	120	
Heat deflection temperature (1,82 MPa)	ASTM D-648	°C	50	
Electrical				
Comparative tracking index (Sol A)	IEC 60112	V	600	
Dielectric strength	IEC 60243	kV/mm		18
Dissipation factor	IEC 60250		0,020	0,120
Relative permittivity	IEC 60250		3,50	4
Surface resistivity	IEC 60093	Ohm	1E 13	1E 11
Volume resistivity	IEC 60093	Ohm/cm	1E 15	1E 11
Specific				
Identification code				PA6-I

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, MERCHANTABILITY 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 - 240 °C
 - mixing zone 235 - 245 °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

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>