



TECHNYL 1011R BRIGHT

Description

TECHNYL® 1011R BRIGHT is a Polyamide 6, Unfilled, Fast cycle, Lubricated, for injection molding.

This product is available in bright (natural).

Benefits

This grade offers an excellent flow ability.

Applications

It is used in all sectors of industry, such as:

- Fastener, Clip, Gear, Bobbin, Hand mixer cover

Key Properties

Fast cycle
Chemical resistance

Regional Availability

Asia / Pacific

Properties

Typical values of properties are for natural grades

| | Standards | Unit | Values | |
|---|-----------------|-------------------|----------|-------|
| | | | d.a.m. | Cond. |
| Physical | | | | |
| Water absorption | ISO 62 | % | 1,30 | |
| Density | ISO 1183/A | g/cm ³ | 1,14 | |
| Molding shrinkage Parallel | RHODIA | % | 1,10 - 2 | |
| Molding shrinkage normal or perpendicular | RHODIA | % | 1,20 - 2 | |
| Mechanical | | | | |
| Tensile strength at yield | ASTM D-638 | MPa | 80 | |
| Elongation at break | ASTM D-638 | % | 45 | |
| Flexural modulus | ASTM D-790 | MPa | 2950 | |
| Flexural maximum stress | ASTM D-790 | MPa | 115 | |
| Izod notched impact strength | ASTM D256 | J/m | 85 | |
| Flammability | | | | |
| Flammability (Thickness: 0,8 mm) | ISO 1210 / UL94 | | V2 | |
| Thermal | | | | |
| Melting Temperature | ISO 11357 | °C | 222 | |
| Heat deflection temperature (0,45 MPa) | ASTM D-648 | °C | 180 | |
| Heat deflection temperature (1,82 MPa) | ASTM D-648 | °C | 60 | |
| Electrical | | | | |
| Comparative tracking index (Sol A) | IEC 60112 | V | 600 | |
| Dielectric strength | IEC 60243 | kV/mm | | 18 |
| Dissipation factor | IEC 60250 | | 0,020 | 0,100 |
| Relative permittivity | IEC 60250 | | 3,40 | 3,90 |
| Surface resistivity | IEC 60093 | Ohm | 1E 13 | 1E 11 |
| Volume resistivity | IEC 60093 | Ohm/cm | 1E 15 | 1E 11 |
| Specific | | | | |
| Identification code | | | | PA6 |

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 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.

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>