



TECHNYL A 218 V30 BLACK 34 NG-K

Description

TECHNYL® A 218 V30 Black 34 NG-K is a polyamide 66, reinforced with 30% of glass fiber, heat stabilized, for injection molding. The product is available in black color.

Key Properties

Excellent combination between thermal & mechanical properties
Excellent glycol resistance

Benefits

This product has been specially designed to improve its resistance to automotive cooling liquids, increasing lifetime of parts in permanent contact with such a liquids.

Applications

Cooling and heating radiator systems, header tanks, thermostat components, inlet & outlet pipes...

Properties

Typical values of properties are for black grades

| | Standards | Unit | Values | |
|---|-----------------|-------------------|--------|-----------|
| | | | d.a.m. | Cond. |
| Physical | | | | |
| Density | ISO 1183/A | g/cm ³ | 1,37 | |
| Molding shrinkage Parallel | RHODIA | % | 0,50 | |
| Molding shrinkage normal or perpendicular | RHODIA | % | 0,80 | |
| Mechanical | | | | |
| Elongation at break | ASTM D-638 | % | 3 | |
| Flexural modulus | ASTM D-790 | MPa | 9500 | |
| Flexural maximum stress | ASTM D-790 | MPa | 290 | |
| Izod notched impact strength (23 °C) | ASTM D256 | J/m | 115 | |
| Flammability | | | | |
| Flammability | ISO 1210 / UL94 | | HB | |
| Glow Wire Flammability Index (Thickness: 1,6 mm) | ISO 60695-2-12 | °C | 650 | |
| Limit Oxygen Index | ISO 4589 | | 23 | |
| Thermal | | | | |
| Melting Temperature | ASTM D3418 | °C | 262 | |
| Heat deflection temperature (1,82 MPa) | ASTM D-648 | °C | 255 | |
| Coef of Linear thermal expansion normal or perpendicular (23°C to 85°C) | ISO 11359 | E-5/°C | 2,5 | |
| Coef of Linear thermal expansion parallel (23°C to 85°C) | ISO 11359 | E-5/°C | 2,5 | |
| Electrical | | | | |
| Comparative tracking index (Sol A) | IEC 60112 | V | 600 | 600 |
| Comparative tracking index (Sol B) | IEC 60112 | V | 500 | |
| Dielectric strength | IEC 60243 | kV/mm | 34 | 29 |
| Dissipation factor | IEC 60250 | | 0,010 | 0,110 |
| Relative permittivity | IEC 60250 | | 3,70 | 4 |
| Surface resistivity | IEC 60093 | Ohm | 6E 14 | 1E 12 |
| Volume resistivity | IEC 60093 | Ohm/cm | 1E 15 | 1E 13 |
| Specific | | | | |
| Identification code | | | | PA66-GF30 |

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 260 - 270 °C
- compression zone 270 - 280 °C
- mixing zone 280 - 290 °C

Mould temperatures: 70 - 100 °C

Steel advice for tools For reinforced polyamide (glass fibre, glass sphere, mineral fibre...), Solvay recommends the use of steel with a high content of Carbon and purified for polishing to avoid or limit the abrasion. For example: Z38CDV5W or Z160CDV12.

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>