



TECHNYL A 218C V10 NATURAL

Description

TECHNYL® A 218C V10 Natural is a polyamide 66, reinforced with 10% of glass fibre, heat stabilized, for injection moulding. This product is available in natural color.

Key Properties

Electrical conductivity
Dimensional stability
Low warpage
Mechanical performance

Benefits

Due to specially developed additives, the product offers a good electrical conductivity, combined with a good dimensional stability.

Applications

It is mostly used for fuel or oil filters.

Properties

Typical values of properties are for black grades

| | Standards | Unit | Values | |
|--|-----------------|-------|--------|----------------|
| | | | d.a.m. | Cond. |
| Physical | | | | |
| Water absorption(24h at 23°C) | ISO 62 | % | 1,20 | |
| Density | ASTM D-792 | g/cm3 | 1,20 | |
| Mechanical | | | | |
| Tensile Modulus | ISO 527 Type 1A | MPa | 5500 | 3200 |
| Tensile strength at break | ISO 527 Type 1A | MPa | 100 | 70 |
| Elongation at break | ISO 527 Type 1A | % | 4 | 10 |
| Flexural modulus | ISO 178 | MPa | 4200 | 2400 |
| Flexural maximum stress | ISO 178 | | | 95 |
| Charpy notched impact strength (23 °C) | ISO 179/1eA | kJ/m2 | 4,5 | 6,5 |
| Charpy unnotched impact strength (23 °C) | ISO 179/1eU | kJ/m2 | 40 | 50 |
| Flammability | | | | |
| Flammability (Thickness: 1,6 mm) | ISO 1210 / UL94 | | HB | |
| Glow Wire Flammability Index (Thickness: 1,6 mm) | ISO 60695-2-12 | °C | 650 | |
| Thermal | | | | |
| Melting Temperature | ASTM D3417 | °C | 260 | |
| Heat deflection temperature (1,8 MPa) | ISO 75/Af | °C | 232 | |
| Electrical | | | | |
| Surface resistivity | ASTM D-257 | | | 1E 12 |
| Volume resistivity | ASTM D-257 | | | 1E 12 |
| Specific | | | | |
| Identification code | | | | PA66-(GF10+CF) |

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 | 250 - 270 °C |
| - compression zone | 260 - 280 °C |
| - mixing zone | 260 - 280 °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.

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>