Engineering Plastics'
TECHNYL®

Product Data Sheet

06.12.2011

TECHNYL A 218 V35 BLACK 34 NG

Description

TECHNYL® A 218 V35 Black 34 NG is a polyamide 66, reinforced with 35% of glass fiber, heat stabilized, for injection molding. The product is available in black color.

Key Properties

Excellent combination between thermal & mechanical properties
Good 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 liquids.

Applications

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

More info : www.rhodia.com Tel: 00 800 55 400 600
Contact : engineeringplastics-business@eu.rhodia.com

Rhodia

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	%	0,75	
Density	ISO 1183/A	g/cm3	1,41	
Mechanical				
Tensile Modulus	ISO 527 Type 1A	MPa	12000	8700
Tensile strength at break	ISO 527 Type 1A	MPa	210	150
Elongation at break	ISO 527 Type 1A	%	3	4
Charpy notched impact strength (23 °C)	ISO 179/1eA	kJ/m2	13,5	18,5
Charpy unnotched impact strength (23 °C)	ISO 179/1eU	kJ/m2	95	100
Izod notched impact strength (23 °C)	ISO 180/1A	kJ/m2	13	18
Flammability				
Flammability (Thickness: 0,8 mm)	ISO 1210 / UL94		HB	
Limit Oxygen Index	ISO 4589		23	
Thermal				
Melting Temperature	ISO 11357	°C	260	
Heat deflection temperature (1,8 MPa)	ISO 75/Af	°C	255	
Coef of Linear thermal expansion parallel (23°C to 85°C)	ISO 11359	E-5/°C	2,2	
Electrical				
Comparative tracking index (Sol A)	IEC 60112	V	600	600
Dielectric strength	IEC 60243	kV/mm	34	29
Dissipation factor	IEC 60250		0,010	0,110
Surface resistivity	IEC 60093	Ohm	6E 14	1E 12
Volume resistivity	IEC 60093	Ohm/cm	1E 15	1E 13
Specific				
Identification code			PA66-GF35	
IMDS Number			4654426/3	

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 glass fibers reinforced polyamide, Rhodia recommends the use of steel with a high content of Carbon and purified for polishing to avoid or limit the abrasion. For example: Z38CDV5W orZ160CDV12.

Disclaimer

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 Rhodia Product range on our internet product finder at the following address:
http://www.rhodia.com/en/markets_and_products/product_finder