

TECHNYL® A 218G1 V30 BLACK 34 N

Product Datasheet - June 2007

Description

Polyamide 66, reinforced with 30% of glass fibre, for injection moulding This grade shows an improved retention of properties after long term ageing in automotive cooling liquids. For 700 hours' ageing at 132 °C and pressure of 2 bars in water glycol environment, impact properties are increased by 50% in comparison with standard glycol grade TECHNYL A218 V30 black 34NG.

Product Applications

TECHNYL® A 218 G1 V30 BLACK 34N is particularly recommended for the injection moulding of parts in permanent contact with cooling liquids in cars, such as: cooling and heating radiator systems, header tanks, thermostat components, inlet / outlet pipes.

This product is available in black.

Processing

The material is supplied in airtight bags, ready for use. In the case that the virgin material has absorbed moisture, it must be dried to a final moisture content of less than 0,2% with a dehumidified air drying equipment at approx 80°C.

Recommended moulding conditions :

Barrel temperatures :

- feed zone 260 - 270°C
- compression zone 270 - 280°C
- front zone 280 - 290°C

Mould temperatures: 80 at 100°C

For more detailed information please refer to the Safety Data Sheet

Safety

Please refer to the Safety Data Sheet 182M7UTR8FS



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The values of properties are for black grade.

Properties	Standards	Unit	Values	
			d.a.m*.	Cond.**
Physical				
Water absorption (24 h at 23°C)	ISO 62	%	0.80	-
Density	ISO 1183-A	g/cm3	1.37	-
Molding shrinkage Parallel (1) (RHODIA-EP)	RHODIA-EP	%	0.5	-
Molding shrinkage normal or perpendicular (1) (Rhodia EP)	RHODIA-EP	%	0.80	-
Mechanical				
Tensile modulus	ISO 527 type 1 A	MPa	10000	7500
Elongation at break	ISO 527 type 1 A	%	3	4
Tensile strength at break	ISO 527 type 1 A	MPa	195	140
Flexural modulus	ISO 178	MPa	9200	6400
Flexural maximum stress	ISO 178	MPa	280	185
Charpy notched impact strength	ISO 179/1eA	kJ/m2	11	15
Charpy unnotched impact strength	ISO 179/1eU	kJ/m2	85	100
Charpy unnotched impact after ageing water/glycol (200h at 135°C)	ISO 179/1fU	kJ/m2	55	-
Izod notched impact strength	ISO 180/1A	kJ/m2	10	18
Flamability				
Flammability UL 94 (Thickness 1,6 mm)	ISO 1210/UL 94		HB	-
Glow wire flammability index (thickness = 1,6)	IEC 60695-2-12	°C	650	-
Limit Oxygen index	ISO 4589		23	-
Thermal				
Melting Temperature	ISO 11357	°C	263	-
Heat deflection temperature, 1,8 Mpa	ISO 75/Af	°C	250	-
Coef. of Linear thermal expansion normal or perpendicular (23°C to 85°C)	ISO 11359	E-5 / °C	2	-
Electrical				
Dissipation factor	IEC 60250		0.01	0.11
Volume resistivity	IEC 60093	Ohm.cm	10E14	10E12
Surface resistivity	IEC 60093	Ohm	60E13	10E11
Dielectric strength	IEC 60243	kV/mm	34	29
Comparative tracking index sol. A	IEC 60112	Volt	450	425
Comparative tracking index sol. B	IEC 60112	Volt	350	-
Specific				
IMDS id number	Rhodia		5561092 / 1	-

Identification Code : >PA66-GF30<

The information contained in this document is supplied in good faith. It is based on the extent of our knowledge of the products as listed, and on the tests and experiments carried out in our laboratories. It is to be used only as an indication and shall not be construed in any way as a format commitment or warranty of our part. Compliance of our products with your conditions or use can only be determined pursuant to your own prior appropriate list. The listed values of properties are for natural grade, if not otherwise specified.

d.a.m*.

Cond.**



Engineering Plastics

