

## TECHNYL® A 218G1 V25 BLACK 34 N

Product Datasheet - June 2007

### Description

Polyamide 66, reinforced with 25% of glass fibre, for injection moulding. This grade shows an improved retention of properties after long term ageing in automotive cooling liquids.

### Product Applications

TECHNYL® A 218G1 V25 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

### Safety

Please refer to the Safety Data Sheet FA4A9KHC8FS

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The values of properties are for black grade.

Properties	Standards	Unit	Values	
			d.a.m*.	Cond.**
<b>Physical</b>				
Water absorption (24 h at 23°C)	ISO 62	%	0.90	-
Density	ISO 1183-A	g/cm3	1.32	-
Molding shrinkage Parallel (1) (RHODIA-EP)	RHODIA-EP	%	0.60	-
Molding shrinkage normal or perpendicular (1) (Rhodia EP)	RHODIA-EP	%	0.80	-
Molding Shrinkage Isotropy	RHODIA-EP		0.75	-
<b>Mechanical</b>				
Tensile modulus	ISO 527 type 1 A	MPa	8400	6300
Elongation at break	ISO 527 type 1 A	%	3	4
Tensile strength at break	ISO 527 type 1 A	MPa	170	-
Flexural modulus	ISO 178	MPa	7900	5000
Flexural maximum stress	ISO 178	MPa	255	155
Charpy notched impact strength	ISO 179/1eA	kJ/m2	10	13
Charpy unnotched impact strength	ISO 179/1eU	kJ/m2	68	87
Charpy unnotched impact after ageing water/glycol (200h at 135°C)	ISO 179/1fU	kJ/m2	50	-
Izod notched impact strength	ISO 180/1A	kJ/m2	8	15
<b>Flamability</b>				
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	-
<b>Thermal</b>				
Melting Temperature	ISO 11357	°C	263	-
Heat deflection temperature, 1,8 Mpa	ISO 75/Af	°C	245	-
Coef. of Linear thermal expansion parallel (23°C to 85°C)	ISO 11359	E-5 / °C	2.70	-
<b>Electrical</b>				
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	-
<b>Specific</b>				
IMDS id number	Rhodia		4684347 / 1	-

## Identification Code : >PA66-GF25<

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.\*\*



CHALLENGING BOUNDARIES

Engineering Plastics