TECHNYL® A 218 S40 BLACK 21 N

Product Datasheet - June 2007

Description

Polyamide 66, reinforced with 40% of glass spheres, heat stabilized, for injection moulding.

Product Applications

TECHNYL ® A 218 S40 is used in all sectors of industry, offering an excellent combination between thermal and mechanical properties.
This grade is recommended for mechanical components which require a very good surface finish with low warpage, and good compression strength (bearing housings).

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: 60 at 80°C
For more detailed information, please refer to the technical sheet Injection moulding.

Safety

Please refer to the Safety Data Sheet QAF5JANT8FS

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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	%	0.70	-
Density	ISO 1183-A	g/cm3	1.47	-
Molding shrinkage Parallel (1) (RHODIA-EP)	RHODIA-EP	%	1.40	-
Molding shrinkage normal or perpendicular (1) (Rhodia EP)	RHODIA-EP	%	1.40	-
Molding Shrinkage Isotropy	RHODIA-EP		1	-
Mechanical				
Tensile modulus	ISO 527 type 1 A	MPa	5000	3000
Tensile strength at yield	ISO 527 type 1 A	MPa	90	55
Elongation at yield	ISO 527 type 1 A	%	4	20
Elongation at break	ISO 527 type 1 A	%	15	35
Tensile strength at break	ISO 527 type 1 A	MPa	85	50
Flexural modulus	ISO 178	MPa	4700	2450
Flexural maximum stress	ISO 178	MPa	150	75
Charpy notched impact strength	ISO 179/1eA	kJ/m2	4	7.5
Charpy unnotched impact strength	ISO 179/1eU	kJ/m2	25	-
Charpy unnotched impact strength	ISO 179/1eU	kJ/m2	-	NB
Izod notched impact strength	ISO 180/1A	kJ/m2	3	7
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		26	-
Thermal				
Melting Temperature	ISO 11357	°C	263	-
Heat deflection temperature, 1,8 Mpa	ISO 75/Af	°C	100	-
Coef. of Linear thermal expansion normal or perpendicular (23°C to 85°C)	ISO 11359	E-5 / °C	6	-
Electrical				
Relative permittivity	IEC 60250		4	5
Dissipation factor	IEC 60250		0.01	0.11
Volume resistivity	IEC 60093	Ohm.cm	10E14	10E12
Surface resistivity	IEC 60093	Ohm	50E13	50E10
Dielectric strength	IEC 60243	kV/mm	30	26
Comparative tracking index sol. A	IEC 60112	Volt	450	400

Identification Code : >PA66-GB40<

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.**

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