TECHNYL® A 217 BLACK 1 N

Product Datasheet - June 2007

Description

Unreinforced polyamide 66, heat stabilized, medium viscosity, for injection moulding.

Product Applications

Techny l® A 217 BLACK 1N offers all the primary properties of unreinforced polyamide 66. In addition it has improved resistance to high temperature and it can be used for components which have to withstand long term temperature stresses, it can be vacuum metalized with very good surface quality and adhesion of the aluminum surface and in case of fire its smoke rate is very low. It perfectly suits for the production of the following components:

- Automotive industry: head lamp bezels, diagnostic plugs
- Electrical industry: connectors complying with NFF 16-102 rating I4 F2

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 250 - 270°C
- compression zone 260 - 280°C
- front zone 270 - 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 KVLJO3QL8FS

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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	%	1.30	-
Density	ISO 1183-A	g/cm3	1.14	-
Molding shrinkage Parallel (1) (RHODIA-EP)	RHODIA-EP	%	1.90	-
Molding shrinkage normal or perpendicular (1) (Rhodia EP)	RHODIA-EP	%	1.90	-
Molding Shrinkage Isotropy	RHODIA-EP		1	-
Mechanical				
Tensile modulus	ISO 527 type 1 A	MPa	3000	1500
Tensile strength at yield	ISO 527 type 1 A	MPa	90	60
Elongation at yield	ISO 527 type 1 A	%	6	30
Elongation at break	ISO 527 type 1 A	%	15	300
Tensile strength at break	ISO 527 type 1 A	MPa	55	70
Flexural modulus	ISO 178	MPa	2900	1450
Flexural maximum stress	ISO 178	MPa	120	50
Charpy notched impact strength	ISO 179/1eA	kJ/m2	4.5	14
Charpy unnotched impact strength	ISO 179/1eU	kJ/m2	NB	NB
Izod notched impact strength	ISO 180/1A	kJ/m2	4	12
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	-
Glow wire ignition temperature (thickness = 1,6)	IEC 60695-2-13	°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	75	-
Coef. of Linear thermal expansion parallel (23°C to 85°C)	ISO 11359	E-5 / °C	7	-
Electrical				
Relative permittivity	IEC 60250		2.90	3.20
Dissipation factor	IEC 60250		0.03	0.08
Volume resistivity	IEC 60093	Ohm.cm	10E14	10E13
Surface resistivity	IEC 60093	Ohm	10E14	10E12
Dielectric strength	IEC 60243	kV/mm	27	26
Comparative tracking index sol. A	IEC 60112	Volt	600	600
Comparative tracking index sol. B	IEC 60112	Volt	450	-

Identification Code : >PA66<

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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