

TECHNYL® A 218

Product Datasheet - July 2007

Description

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

Product Applications

TECHNYL® A 218 offers all of the primary properties of unreinforced polyamide 66.

In addition, it has improved resistance to high temperature, and can be used for components which will withstand long-term temperature stresses, such as:

- automotive industry: diagnostic plugs, connectors.
- electrical industry: housings, connectors, cable ties.

This product is available in natural and 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	250 - 270°C
	- compression zone	260 - 280°C
	- front zone	270 - 290°C

Mould temperatures: 60 - 80°C

For more detailed information, please refer to the technical sheet "Injection moulding".

Safety

Please refer to the Safety Data Sheet N55BENDA8FS



TECHNYL® A 218

The values of properties are for natural 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	%	35	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		V2	-
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	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	500	575
Comparative tracking index sol. B	IEC 60112	Volt	350	-
Specific				
IMDS id number	Rhodia		4611108 / 3	-

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.**

