

TECHNYL® A 20 V25 NATURAL

Product Datasheet - July 2007

Description

Flame retardant polyamide 66, reinforced with 25% of glass fibre, for injection moulding.

Product Applications

This phosphorous flame retardant grade, UL 94 V0 (0.8 mm), offers excellent filling qualities and with good mechanical properties. This grade is suitable for moulding insulating parts for electrical devices: connectors, switch units, bobbins, industrial controls and more generally for thin parts under stress.

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 270 - 275°C
- compression zone 275 - 280°C
- front zone 280 - 285°C

Mould: 60 at 80°C

Safety

Please refer to the Safety Data Sheet 5UTB2G608FS

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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	%	0.75	-
Density	ISO 1183-A	g/cm3	1.38	-
Molding shrinkage Parallel (1) (RHODIA-EP)	RHODIA-EP	%	0.5	-
Molding shrinkage normal or perpendicular (1) (Rhodia EP)	RHODIA-EP	%	0.90	-
Molding Shrinkage Isotropy	RHODIA-EP		0.55	-
Mechanical				
Tensile modulus	ISO 527 type 1 A	MPa	9000	6500
Elongation at break	ISO 527 type 1 A	%	2	4.10
Tensile strength at break	ISO 527 type 1 A	MPa	140	105
Flexural modulus	ISO 178	MPa	7500	6000
Flexural maximum stress	ISO 178	MPa	250	155
Charpy notched impact strength	ISO 179/1eA	kJ/m2	8	9
Charpy unnotched impact strength	ISO 179/1eU	kJ/m2	50	60
Izod notched impact strength	ISO 180/1A	kJ/m2	8	9
Flamability				
Flammability UL 94 (Thickness 0,8 mm)	ISO 1210/UL 94		V0	-
Flammability UL 94 (Thickness 1,6 mm)	ISO 1210/UL 94		V0	-
Flammability UL 94 (Thickness 3,2 mm)	ISO 1210/UL 94		V0	-
Glow wire flammability index (thickness = 1,6)	IEC 60695-2-12	°C	960	-
Glow wire ignition temperature (thickness = 1,6)	IEC 60695-2-13	°C	725	-
Limit Oxygen index	ISO 4589		30.5	-
Thermal				
Melting Temperature	ISO 11357	°C	263	-
Heat deflection temperature, 1,8 Mpa	ISO 75/Af	°C	250	-
Coef. of Linear thermal expansion parallel (23°C to 85°C)	ISO 11359	E-5 / °C	3	-
Electrical				
Relative permittivity	IEC 60250		3.40	4
Dissipation factor	IEC 60250		0.02	0.05
Volume resistivity	IEC 60093	Ohm.cm	10E14	10E12
Surface resistivity	IEC 60093	Ohm	10E12	10E11
Dielectric strength	IEC 60243	kV/mm	25	25
Comparative tracking index sol. A	IEC 60112	Volt	400	-

Identification Code : >PA66-GF25 FR(52)<

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