

TECHNYL® A 31H1 MX35

Product Datasheet - June 2007

Description

Flame retardant polyamide PA66, 35% mineral filled, heat stabilised, for injection moulding.

Product Applications

This flame retardant material, UL 94 V1 rated under 1.6 mm, has a low moisture recovery and offers very good dimensional stability. This product is particularly recommended for electrical parts such as;

- low voltage distribution, protection systems, Mini circuit breakers, fuse-holders and terminal blocks.

This product is available in Grey RAL 7035 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 280 - 285°C
- front zone 285 - 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 VSQPP53O8FS

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The values of properties are for grey grade.

Properties	Standards	Unit	Values	
			d.a.m*.	Cond.**
Physical				
Water absorption (24 h at 23°C)	ISO 62	%	0.35	-
Density	ISO 1183-A	g/cm3	1.65	-
Molding shrinkage Parallel (1) (RHODIA-EP)	RHODIA-EP	%	0.70	-
Molding shrinkage normal or perpendicular (1) (Rhodia EP)	RHODIA-EP	%	0.65	-
Molding Shrinkage Isotropy	RHODIA-EP		1.08	-
Mechanical				
Tensile modulus	ISO 527 type 1 A	MPa	9300	-
Elongation at break	ISO 527 type 1 A	%	2	3.20
Tensile strength at break	ISO 527 type 1 A	MPa	72	50
Flexural modulus	ISO 178	MPa	8350	5500
Flexural maximum stress	ISO 178	MPa	110	85
Charpy notched impact strength	ISO 179/1eA	kJ/m2	2.5	3
Charpy unnotched impact strength	ISO 179/1eU	kJ/m2	16	20
Izod notched impact strength	ISO 180/1A	kJ/m2	1.5	2
Flamability				
Flammability UL 94 (Thickness 0,8 mm)	ISO 1210/UL 94		V2	-
Flammability UL 94 (Thickness 1,6 mm)	ISO 1210/UL 94		V1	-
Flammability UL 94 (Thickness 3,2 mm)	ISO 1210/UL 94		V0	-
Glow wire flammability index (thickness = 0,8)	IEC 60695-2-12	°C	960	-
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	775	-
Limit Oxygen index	ISO 4589		45	-
Thermal				
Melting Temperature	ISO 11357	°C	263	-
Heat deflection temperature, 1,8 Mpa	ISO 75/Af	°C	200	-
Electrical				
Dissipation factor	IEC 60250		0.02	0.05
Volume resistivity	IEC 60093	Ohm.cm	50E14	50E14
Surface resistivity	IEC 60093	Ohm	70E13	10E13
Dielectric strength	IEC 60243	kV/mm	36	40
Comparative tracking index sol. A	IEC 60112	Volt	600	-

Identification Code : >PA66-MD35 FR(17)<

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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