TECHNYL® A 402 H1

Product Datasheet - December 2004

Description

Unreinforced polyamide 66, very high viscosity, heat stabilized, for extrusion and injection moulding.

Product Applications

TECHNYL® A 402 H1 offers three main advantages: high impact resistance at low humidity levels, good rigidity, and excellent compression resistance. This grade is particularly suitable for the moulding of plastic insulators for railway binding and for extrusion of plates and profiles.

This product is available in natural.

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 2A9T2G298FS

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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	%	1.5	-
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	3100	1300
Tensile strength at yield	ISO 527 type 1 A	MPa	80	60
Tensile strain at yield	ISO 527 type 1 A	%	8	30
Tensile strain at break	ISO 527 type 1 A	%	60	250
Tensile strength at break	ISO 527 type 1 A	MPa	60	-
Flexural modulus	ISO 178	MPa	2800	1300
Flexural maximum stress	ISO 178	MPa	140	75
Charpy notched impact strength	ISO 179/1eA	kJ/m2	7	30
Charpy unnotched impact strength	ISO 179/1eU	kJ/m2	NB	NB
Izod notched impact strength	ISO 180/1A	kJ/m2	6	35
Flamability				
Limit Oxygen index	ISO 4589		27	-
Thermal				
Melting Temperature	ISO 11357	°C	263	-
Heat deflection temperature, 1,8 Mpa	ISO 75/Af	°C	75	-
Coef. of Linear thermal expension normal or perpendicular (23°C to 85°C)	ISO 11359	E-5 / °C	7	-
Electrical				
Dissipation factor	IEC 60250		0.02	0.10
Volume resistivity	IEC 60093	E14.Ohm.cm	10	0.010000
Surface resistivity	IEC 60093	E14.Ohm	0.100000	0.010000
Dielectric strength	IEC 60243	kV/mm	27	26
Comparative tracking index sol. A	IEC 60112	Volt	475	575

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 = Dry As Moulded.

** Cond. = Conditioned according ISO 1110.

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