TL/0022/1997.289/UK

TECHNYL ® A 20

Description	Flame retardant polyamide PA 66 , unreinforced , for injection moulding.
Applications	This phosphorous flame retardant grade , UL 94 V0 (0.8 mm) , is suitable for moulding insulating parts for electrical components : - terminal blocks - connectors 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 temperatures : 60 at 80°C For more detailed information , please refer to the technical sheet "Injection moulding".
Safety	Please refer to the Material Safety Data Sheet A2.

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Main properties

Values measured at 23 °C The values of properties are for natural grade.

Properties		Standards	Unit	Values	
				EH 0 – 23 °C	EH 50 – 23 °C
Physical	Water absorption, 24h in water at 23°C	ISO 62	%	1.15	-
	Density	ISO 1183-A	g/cm3	1.17	-
	Moulding shrinkage longitudinal	RHODIA-EP	%	1.9	-
	Moulding shrinkage transverse	RHODIA-EP	%	1.9	-
Mechanical	Tensile Modulus	ISO 527	MPa	3300	2000
	Yield stress	ISO 527	MPa	85	45
	Elongation at yield	ISO 527	%	6	7
	Tensile strain at break	ISO 527	%	6	50
	Stress at 50% elongation	ISO 527	MPa	-	45
	Tensile stress at break	ISO 527	MPa	85	40
	Flexural modulus	ISO 178	MPa	3200	1700
	Flexural strength	ISO 178	MPa	125	60
	Flexural stress at break	ISO 178	MPa	125	70
	Charpy notched impact strength	ISO 179/1EA-1993	kJ/m2	2.5	2.7
	Charpy notched impact strength ISO179/1A	ISO 179-1982	kJ/m2	4	7
	Charpy impact strength	ISO 179/1EU-1993	kJ/m2	50	NB
	Charpy impact strength ISO 179/1D	ISO 179-1982	kJ/m2	30	NB
	Izod notched impact strength	ISO 180	kJ/m2	3.5	4.5
Thermal	Melt temperature	ISO 3146 - C	°C	263	-
	Temper. of dimensional stability 1,8 MPa	ISO 75-2	°C	70	-
	Coef. linear expansion longit. 23°C-85°C	ASTM E 831	E-5 / °C	7	-
	Flammability UL94 thickness 0,8mm	ISO 1210/UL 94	-	V0	-
	Flammability UL94 thickness 1,6 mm	ISO 1210/UL 94	-	V0	-
	Glow wire test thickness 1,6 mm	IEC 695-2-1	°C	960	-
	Glow wire test thick. 1,6 mm : no flame	IEC 695-2-1	°C	650	-
Electrical	Relative permittivity 1MHz	IEC 250	-	2.7	3
	Dissipation factor 1 MHz	IEC 250	-	0.02	0.05
	Volume resistivity	IEC 93	E14.Ohm.cm	10	1
	Surface resistivity	IEC 93	E14.Ohm	5	0.4
	Dielectric strength	IEC 243-1	kV/mm	35	35
	Comparative tracking index sol. A	IEC 112	Volt	500	475
	Comparative tracking index sol. B	IEC 112	Volt	500	-
Specifical	Limit oxygen index	ISO 4589	%	31.5	-

Identification code >PA66<

Rhodia

Engineering Plastics

Avenue Ramboz BP 64 F-69192 Saint-Fons Cedex. Telephone: +33 (0)4 72 89 27 00 Fax: +33(0)4 72 89 27 01

RHODIA ENGINEERING PLASTICS. Société Anonyme au capital de 271 256 400 F - 393 335 104 RCS Lyon