TECHNYL[®] 4EARTH[®]

Sustainable polyamide



TECHNICAL DATA SHEET

TECHNYL 4EARTH A9E 218 C30 NC H

(Previously ECONAMID AIR 66RC30H2 NC99)

Polyamide 66, 30% carbon fiber reinforced, heat-aging stabilized, for injection moulding, natural color

General

Feature	Heat-aging stabilized
Polymer type	PA66 (Polyamide 66)
Processing technology	Injection molding
Certification	RoHS

Product identification

ISO 1043 abbreviation	PA66-CF30
ISO 16396 designation	PA66,CF30(R100),M1H,S14-220

Physical properties			
Density	ISO 1183	g/cm³	1.27
Molding shrinkage, parallel	ISO 294-4, 2577	%	0.15 - 0.35
Molding shrinkage, normal	ISO 294-4, 2577	%	0.5 - 0.8

Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	23000 / 15000
Stress at break	5 mm/min	ISO 527-1/-2	MPa	240 / 170
Strain at break	5 mm/min	ISO 527-1/-2	%	2.6 / 4
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	20000 / 13500
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	50 / 70
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	7.5 / 11

Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	262
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	250

Electrical properties

Volume resistivity	IEC 62631-3-1	ohm.m	10
Surface resistivity	IEC 62631-3-1	ohm	100

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Burning behaviour

Flammability, 0.75 mm	0.75 mm	UL 94	НВ
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302	< 100 mm/min

Test run at 23°C if not differently specified, DAM state (dry as moulded). *: conditioned according to ISO 1110

Processing conditions

Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)	
Recommended melt temperature	270 - 300 °C	
Recommended mould temperature	80 - 110 °C	

These parameters are typical of the product but should be related to the type of machinery used and to the type of moulded part. Thess TECHNYL grades are not recommended for injection moulding hot runner systems with a diameter below 1mm.

Disclaimer

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