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TECHNYL® 4EARTH®
Sustainable polyamide

DOMO
caring is our formula

TECHNICAL DATA SHEET

TECHNYL 4EARTH C2E 218 V35 BK H

(Previously ECONAMID FL 6G35H2 BK)

Polyamide 6, 35% glass fiber reinforced, heat-aging stabilized, for injection moulding, black

General

Feature	Heat-aging stabilized	
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Colors available	Black	
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA6-GF35
ISO 16396 designation	PA6,GF35(R100),M1H,S14-100

Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm³	1.42
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2.2 - 2.4
Water absorption	24 hr, 23°C	ISO 62	%	1.4 - 1.5
Water absorption, saturation			%	6.22
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.25 - 0.45
Molding shrinkage, normal		ISO 294-4, 2577	%	0.75 - 0.95
Viscosity number	96% H2SO4	ISO 307	cm³/g	135

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	Condition	Standard	Unit	Value
Mechanical properties				**dam / cond.***
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	10500 / 5500
Stress at break	5 mm/min	ISO 527-1/-2	MPa	150 / 90
Strain at break	5 mm/min	ISO 527-1/-2	%	2.5 / 6
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	9000 / 5000
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	230 / 140
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	62 / 75
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m²	55 / 60
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	9 / 19
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m²	6 / 7
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	221
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	220
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	210
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	210
Electrical properties				
Volume resistivity		IEC 62631-3-1	ohm.m	1E+016
Surface resistivity		IEC 62631-3-1	ohm	1E+014
Comparative tracking index	Solution A	IEC 60112	V	450
CTI performance level category		Sol A		PLC 1
Burning behaviour				
Flammability		UL 94		HB
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	250 - 290 °C
Recommended mould temperature	80 - 100 °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.

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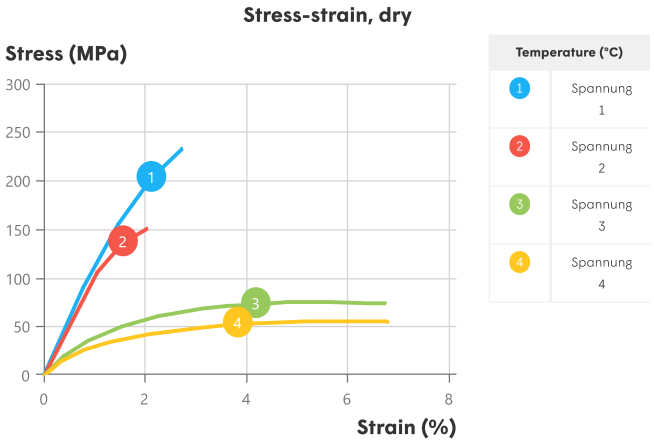

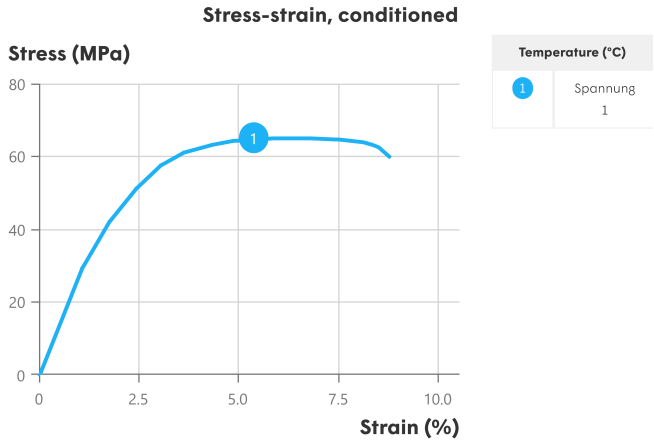

Disclaimer

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