

TECHNICAL DATA SHEET

TECHNYL 4EARTH A3E 216M BK

General

Feature	Impact modified
Polymer type	PA66 (Polyamide 66)
Processing technology	Injection molding
Certification	RoHS EC 1907/2006 (REACH)
Applications	Automotive Applications
Colors available	Black
Forms	Pellets

Product identification

ISO 1043 abbreviation	PA66-I
ISO 16396 designation	PA66-I,(R>50),M1,S14-030

	Condition	Standard	Unit	Value
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Physical properties

Density		ISO 1183	g/cm³	1.11
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.4 - 1.6
Molding shrinkage, normal		ISO 294-4, 2577	%	1.5 - 1.7
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm³/10 min	85 - 105
Melt flow rate, MFR		ISO 1133	g/10 min	100

Mechanical properties

				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2100 / 750
Stress at break		ISO 527-1/-2	MPa	50 / 30
Strain at break		ISO 527-1/-2	%	9 / 45
Yield stress		ISO 527-1/-2	MPa	- / 35
Yield strain		ISO 527-1/-2	%	5 / 35
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	1800 / 650
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	75 / 45
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	30 / 100
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	3 / 6

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Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	261
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	189
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	70

Burning behaviour

Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		<100
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Test run at 23°C if not differently specified, DAM state (dry as moulded), valid for black products.
*: conditioned according to ISO 1110

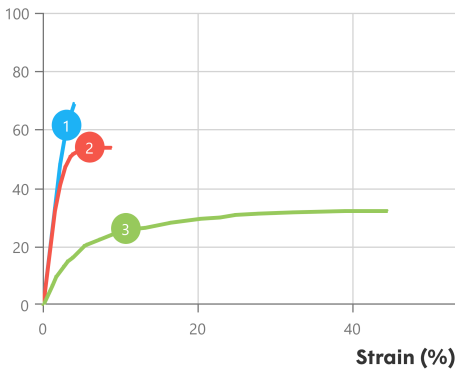
Processing conditions

Drying temperature/time	80
Suggested max moisture	0.2 %
Rear temperature	270 - 280 °C
Middle temperature	275 - 285 °C
Front temperature	280 - 290 °C
Recommended mould temperature	70 - 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.

Stress-strain, dry

Stress (MPa)

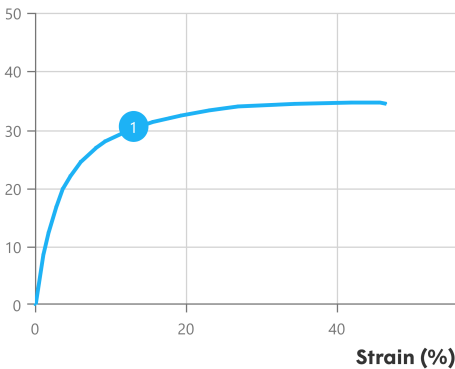


Temperature (°C)

1	Spannung 1
2	Spannung 2
3	Spannung 3

Stress-strain, conditioned

Stress (MPa)



Temperature (°C)

1	Spannung 1
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Disclaimer

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