

TECHNICAL DATA SHEET

TECHNYL A 219 V30 YL 1078 XB

TECHNYL A 219 V30 YL 1078 XB is a polyamide 66, reinforced with 30% of glass fibre, heat stabilized, for injection moulding. This grade offers an improved hydrolysis resistance, as well as an excellent combination between thermal and mechanical properties. It is also restricts electrolytical corrosion.

General

Feature	Heat-aging stabilized	
Polymer type	PA66 (Polyamide 66)	
Processing technology	Injection molding	
Certification	RoHS EC 1907/2006 (REACH)	UL-Yellow Card
Applications	Consumer good application	
Colors available	Black	Natural
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA66-GF30
ISO 16396 designation	PA66,GF30,M1H,S14-100

Condition	Standard	Unit	Value
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Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.36
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2.2 - 2.4
Water absorption	24 hr, 23°C	ISO 62	%	0.8
Water absorption, saturation			%	5.3
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.2 - 0.4
Molding shrinkage, normal		ISO 294-4, 2577	%	0.7 - 0.9

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	10000 / 6600
Stress at break		ISO 527-1/-2	MPa	155 / 110
Strain at break		ISO 527-1/-2	%	2.7 / 3.4
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	9000 / 6000
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	300 / 230
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	70 / 80
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	9 / 13


Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	262
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	260
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	1E+015
Surface resistivity		IEC 62631-3-1	ohm	1E+015
Comparative tracking index	Solution A	IEC 60112	V	575
CTI performance level category		Sol A		PLC 1

Burning behaviour

UL Yellow Card availability 	Click here to have access to the UL Yellow Card → YC			
Flammability, 1.5 mm	1.5 mm	UL 94		HB
Flammability, 3.0 mm	3.0 mm	UL 94		HB
Glow-wire flammability index, GWFI, 1.5 mm	1.5 mm	IEC 60695-2-12	°C	650
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		<100

*: 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
Recommended mould temperature	70 - 100 °C

Injection notes

The material is supplied in airtight bags, ready for use. In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment, dew point minimum -20°C. Recommended time 2-4h.

Disclaimer

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