

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 also restricts electrolytical corrosion.

General

Polymer type	PA66
Certifications	RoHS EC 1907/2006 (REACH) UL listed product
Feature	heat-aging stabilized
Applications	consumer applications
Colors available	black natural
Forms	pellets
Processing technology	injection moulding

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

*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
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

	Condition	Standard	Unit	Value
Burning behaviour				
UL Yellow Card availability 1	Click here to have access to the UL Yellow Card availability 1 -> 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

Condition	Standard	Unit	Value
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Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1.0E15
Surface resistivity		IEC 62631-3-1	ohm	1.0E15
Comparative tracking index	Solution A	IEC 60112	V	575.0
CTI performance level category		Sol A		PLC 1

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