

TECHNICAL DATA SHEET

TECHNYL SAFE A 219FC V30 NC

TECHNYL SAFE A 219FC V30 NC is a polyamide 66, 30% glass fibre reinforced, heat stabilized with organic stabiliser food contact approved for injection moulding. Designed to be used in moulded parts requiring an excellent combination of thermal and mechanical properties, good hydrolysis resistance and food contact compliance in industrial consumer good as well as appliances applications.

General

Polymer type	PA66	
Certifications	RoHS EC 1907/2006 (REACH)	UL listed product
Feature	food contact approved UL HB(obs) organic heat stabilized	hydrolysis stabilized good stiffness chlorine resistant
Applications	consumer applications white goods / small appliances	industrial applications
Colors available	natural	
Forms	pellets	
Processing technology	injection moulding	

Product identification

ISO 1043 abbreviation	PA66-GF30
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Condition	Standard	Unit	Value
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Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.36
Water absorption	24 hr, 23°C	ISO 62	%	0.8
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.35
Molding shrinkage, normal		ISO 294-4, 2577	%	1.1

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1mm/min	ISO 527-1/-2	MPa	10000 / 7000
Stress at break	5mm/min	ISO 527-1/-2	MPa	190 / 125
Strain at break	5mm/min	ISO 527-1/-2	%	3 / 7
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	9000 / 6300
Flexural modulus, ASTM D790	2 mm/min	ASTM D790	MPa	9000 / 7000
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	275 / 215
Flexural strength, ASTM D790	2 mm/min	ASTM D790	MPa	270 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	85 / 95
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	12 / 15
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m ²	75 / 85
Izod impact strength		ISO 180/1U	kJ/m ²	12 / 16

*: **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	255

Condition	Standard	Unit	Value
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Burning behaviour

UL Yellow Card availability 1	Click here to have access to the UL Yellow Card availability 1 -> E44716			
Flammability, 0.75 mm	0.75 mm	UL 94		HB
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

Condition	Standard	Unit	Value
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Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1.0E13
Surface resistivity		IEC 62631-3-1	ohm	1.0E15
Comparative tracking index	Solution A	IEC 60112	V	400.0
CTI performance level category		Sol A		PLC 1
Dielectric strength	1 mm	IEC 60243-1	kV/mm	35.0

Processing conditions

Drying temperature/time	80°C			
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			