TECHNYL® A 218 V30 BLACK 21 NS

Polyamide 66

Solvay Engineering Plastics



Technical Data

Product Description

TECHNYL® A 218 V30 Black 21 NS is a polyamide 66, reinforced with 30% of glass fibre, heat stabilized, for injection moulding. This product is available in black color.

General	
Material Status	Commercial: Active
Literature ¹	 Processing - Rhodia Injection Molding (English) Processing - Technyl A & C Injection Molding (English) Technical Datasheet (English)
UL Yellow Card ²	E44716-235569E44716-235570
Search for UL Yellow Card	 Solvay Engineering Plastics TECHNYL® A
Availability	Africa & Middle East Asia Pacific North America
Filler / Reinforcement	Glass Fiber, 30% Filler by Weight
Additive	Heat Stabilizer
Features	Heat Stabilized
Agency Ratings	• UU 453/2010/EC
RoHS Compliance	RoHS Compliant
Appearance	Black
Processing Method	Injection Molding
Part Marking Code (ISO 11469)	• >PA66-GF30<

Physical	Dry	Conditioned	Unit	Test Method
Specific Gravity				
	0.802 (0.800)		(g/cm³)	ASTM D792
	1.37		g/cm ³	ISO 1183/A
Molding Shrinkage				Internal Method
Across Flow	0.80		%	
Flow	0.50		%	
Water Absorption (73°F (23°C), 24 hr)	0.80		%	ISO 62
Molding Shrinkage Isotropy	0.620			Internal Method
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.45E+6 (10000)	1.09E+6 (7500)	psi (MPa)	ISO 527-2/1A
Tensile Stress (Break)	27600 (190)	19600 (135)	psi (MPa)	ISO 527-2/1A
Tensile Elongation				
Break	3.3		%	ASTM D638
Break	3.0	4.0	%	ISO 527-2/1A
Flexural Modulus				
	1.31E+6 (9000)		psi (MPa)	ASTM D790
	1.31E+6 (9000)	928000 (6400)	psi (MPa)	ISO 178

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Mechanical	Dry	Conditioned	Unit	Test Method
Flexural Strength				
	42100 (290)		psi (MPa)	ASTM D790
	40600	26800 (185)	psi (MPa)	ISO 178
mpact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F (23°C))	5.2 (11)	7.1	ft·lb/in² (k.l/m²)	ISO 179/1eA
Charpy Unnotched Impact Strength	(**)	(10)	(10)11 /	ISO 179/1eU
73°F (23°C)	38 (80)	42 (88)	ft·lb/in² (kJ/m²)	
Notched Izod Impact	(00)	(00)	(10/11/)	
73°F (23°C)	2.2 (120)		ft·lb/in (J/m)	ASTM D256
73°F (23°C)	4.8 (10)	8.6 (18)	ft·lb/in² (kJ/m²)	ISO 180/1A
Unnotched Izod Impact Strength	29 (60)	31 (65)	ft·lb/in² (kJ/m²)	ISO 180
hermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load	101			ASTM D648
264 psi (1.8 MPa), Unannealed	491 (255)		°F (°C)	100 10-2171
Melting Temperature				
	505 (263)		°F (°C)	ISO 11357-3
	500 (260)		°F (°C)	ASTM D3418
CLTE	(200)		(0)	ISO 11359-2
Flow : 73 to 185°F (23 to 85°C)	1.4E-5 (2.5E-5)		in/in/°F (cm/cm/°C)	
Transverse : 73 to 185°F (23 to 85°C)	1.4E-5 (2.5E-5)		in/in/°F (cm/cm/°C)	
lectrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	6.0E+14	1.0E+12	ohms	IEC 60093
Volume Resistivity	1.0E+15	1.0E+13	ohms∙cm	IEC 60093
Electric Strength	860 (34)	740 (29)	V/mil (kV/mm)	IEC 60243-1
Relative Permittivity	3.70	4.00		IEC 60250
Dissipation Factor	0.010	0.11		IEC 60250
Comparative Tracking Index				IEC 60112
Solution A	600	600	V	
Solution B	500		V	
lammability	Dry	Conditioned	Unit	Test Method
Flame Rating (0.0630 in (1.60 mm))	HB			UL 94
Glow Wire Flammability Index				IEC 60695-2-1
0.0630 in (1.60 mm)	1290 (700)		°F (°C)	
Oxygen Index	23		%	ISO 4589-2
Fire and Smoke F Index	12/F3			NF F16-101

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Injection	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80.0 °C
Suggested Max Moisture	0.20 %	0.20 %
Rear Temperature	509 to 527 °F	265 to 275 °C
Middle Temperature	518 to 536 °F	270 to 280 °C
Front Temperature	536 to 554 °F	280 to 290 °C
Mold Temperature	158 to 212 °F	70.0 to 100 °C

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

³ Typical properties: these are not to be construed as specifications.





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Solvay Engineering Plastics

Where to Buy

Supplier

Solvay Engineering Plastics , Germany Telephone: +49-800-55-400-600 Web: http://www.rhodia.com/

Distributor

Amco Polymers Telephone: 800-262-6685 Web: http://www.amcopolymers.com/ Availability: North America

GAZECHIM PLASTIQUES

GAZECHIM PLASTIQUES is a Pan European distribution company. Contact GAZECHIM PLASTIQUES for availability of individual products by country.

Telephone: +33-4-67-49-55-37 Web: http://www.gazechim.com/ Availability: France

GUZMAN GLOBAL S.L Telephone: +34-963-992-400

Web: http://www.grupoguzman.com/ Availability: Portugal, Spain

Nexeo Solutions - Europe

Nexeo Solutions is a Pan European distribution company. Contact Nexeo for availability of individual products by country. Telephone: +34-93-480-9125 Web: http://www.nexeosolutions.com/ Availability: Italy

Polymer Technology & Services, LLC Telephone: 800-475-1701 Web: http://www.ptsllc.com/ Availability: North America

RESINEX Group

RESINEX is a Pan European distribution company. Contact RESINEX for availability of individual products by country. Telephone: +32-14-672511 Web: http://www.resinex.com/ Availability: Europe

Southland Polymers

Southland Pólymers - Full Service Engineering and Commodity Resin Distribution Since 1979 Telephone: 562-921-0444 Web: http://www.southlandpolymers.com/ Availability: Central America, North America, South America

TER HELL PLASTIC GMBH TER HELL PLASTIC is a Pan European distribution company. Contact TER HELL PLASTIC for availability of individual products by country. Telephone: +49-232-3941-0 Web: http://www.terhell.de/ Availability: Germany

The Materials Group Telephone: 616-863-6046 Web: http://thematerialsgroup.com/ Availability: North America



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