TECHNYL® A 20 V25 NATURAL

Polyamide 66

Solvay Engineering Plastics

PROSPECTOR®

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Technical Data

Product Description

TECHNYL® A 20 V25 is a 25% glass fiber reinforced Red Phosphorous flame retarded grade based on a polyamide 66 resin. This product is heat stabiised for optimised injection moulding. This product is available in Natural & Black.

General

Material Status	• Commercial: Active		
Literature [1]	• Processing - Rhodia Injection Molding (English) • Processing - Technyl A & C Injection Molding (English) • Technical Datasheet (English)		
Search for UL Yellow Card	• Solvay Engineering Plastics • TECHNYL® A		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight		
Additive	• Flame Retardant	• Heat Stabilizer	
Features	• Flame Retardant	• Heat Stabilized	
Uses	• Electrical/Electronic Applications • Industrial Applications	• Insulation • Thin-walled Parts	
Agency Ratings	• UU 453/2010/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Black	• Natural Color	
Processing Method	• Injection Molding		
Part Marking Code (ISO 11469)	• >PA66-GF25 FR(52)<		

Physical	Dry	Conditioned	Unit	Test Method
Density	1.38	--	g/cm³	ISO 1183/A
Molding Shrinkage				Internal Method
Across Flow	0.90	--	%	
Flow	0.50	--	%	
Water Absorption (73°F (23°C), 24 hr)	0.75	--	%	ISO 62
Molding Shrinkage Isotropy	0.550	--		Internal Method

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.31E+6 (9000)	943000 (6500)	psi (MPa)	ISO 527-2/1A
Tensile Stress (Break)	20300 (140)	15200 (105)	psi (MPa)	ISO 527-2/1A
Tensile Strain (Break)	2.0	4.1	%	ISO 527-2/1A
Flexural Modulus	1.09E+6 (7500)	870000 (6000)	psi (MPa)	ISO 178
Flexural Stress	36300 (250)	22500 (155)	psi (MPa)	ISO 178

Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F (23°C))	3.8 (8.0)	4.3 (9.0)	ft·lb/in² (kJ/m²)	ISO 179/1eA
Charpy Unnotched Impact Strength				ISO 179/1eU
73°F (23°C)	24 (50)	29 (60)	ft·lb/in² (kJ/m²)	

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Impact	Dry	Conditioned	Unit	Test Method
Notched Izod Impact Strength (73°F (23°C))	3.8 (8.0)	4.3 (9.0)	ft·lb/in² (kJ/m²)	ISO 180/1A
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				ISO 75-2/Af
264 psi (1.8 MPa), Unannealed	482 (250)	--	°F (°C)	
Melting Temperature	505 (263)	--	°F (°C)	ISO 11357-3
CLTE - Flow (73 to 185°F (23 to 85°C))	1.7E-5 (3.0E-5)	--	in/in/°F (cm/cm/°C)	ISO 11359-2
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity	1.0E+13	1.0E+12	ohms	IEC 60093
Volume Resistivity	1.0E+15	1.0E+13	ohms·cm	IEC 60093
Electric Strength	640 (25)	640 (25)	V/mil (kV/mm)	IEC 60243-1
Relative Permittivity	3.40	4.00		IEC 60250
Dissipation Factor	0.020	0.050		IEC 60250
Comparative Tracking Index (Solution A)	400	--	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating				UL 94
0.0315 in (0.800 mm)	V-0	--		
0.0630 in (1.60 mm)	V-0	--		
0.126 in (3.20 mm)	V-0	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.0630 in (1.60 mm)	1760 (960)	--	°F (°C)	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.0630 in (1.60 mm)	1340 (725)	--	°F (°C)	
Oxygen Index	31	--	%	ISO 4589-2
Fire and Smoke F Index	I3/F3	--		NF F16-101

Injection	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80.0 °C
Suggested Max Moisture	0.20 %	0.20 %
Rear Temperature	518 to 527 °F	270 to 275 °C
Middle Temperature	527 to 536 °F	275 to 280 °C
Front Temperature	536 to 545 °F	280 to 285 °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] Typical properties: these are not to be construed as specifications.

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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 Polymers - 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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