

**TECHNYL® PROTECT A 50X1 GY 2670 LP**

DOMO Engineering Plastics - Polyamide 66 + PA 6

## General Information

**Product Description**

\*Previously TECHNYL A 50X1 GREY 2670 LP

TECHNYL PROTECT A 50X1 GY 2670 LP is an unreinforced blend of polyamide 66 and 6 based on a non-phosphorous and non-halogenated flame retardant system, heat stabilized, for injection moulding. This flame retardant grade, UL94 V0 at 0.4mm, offers excellent filling qualities together with good stiffness. This grade has been designed to be laser printable.

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Additive	• Flame Retardant		
Features	• Flame Retardant	• Halogen Free	
Uses	• Connectors	• Electrical/Electronic Applications	
Agency Ratings	• EC 1907/2006 (REACH)	• EN 45545	• UL 94
RoHS Compliance	• RoHS Compliant		
Processing Method	• Injection Molding		
ISO Designation (ISO 16396)	• PA66,0FR(30)0,M1,S14-040		
Resin ID (ISO 1043)	• PA66+PA6 FR(30)		

 Properties <sup>1</sup>

Physical	Dry	Conditioned	Unit	Test Method
Density	1.16	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.72 to 0.80	--	%	
Flow	0.95 to 1.1	--	%	
Water Absorption (24 hr, 73°F)	1.0 to 1.1	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	2.7	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	537000	189000	psi	ISO 527-1
Tensile Stress (Yield)	10900	7250	psi	ISO 527-2
Tensile Stress (Break)	10200	7250	psi	ISO 527-2
Tensile Strain (Yield)	4.0	--	%	ISO 527-2
Tensile Strain (Break)	15	150	%	ISO 527-2
Flexural Modulus	464000	160000	psi	ISO 178
Flexural Stress	15200	7250	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.1	7.6	ft·lb/in <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	40	--	ft·lb/in <sup>2</sup>	ISO 179/1eU
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	392	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	140	--	°F	ISO 75-2/A
Melting Temperature <sup>2</sup>	495	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+15	--	ohms	IEC 62631-3-2
Volume Resistivity	1.0E+13	--	ohms·m	IEC 62631-3-1
Electric Strength	860	--	V/mil	IEC 60243-1
Comparative Tracking Index (CTI)	PLC 0	--		IEC 60112



Comparative Tracking Index	600	--	V	IEC 60112
<b>Flammability</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Burning Rate (0.0394 in)	< 3.9	--	in/min	FMVSS 302
Flame Rating				UL 94
0.016 in	V-0	--		
0.030 in	V-0	--		
0.06 in	V-0	--		
0.12 in	V-0	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.030 in	1760	--	°F	
0.06 in	1760	--	°F	
0.12 in	1760	--	°F	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.016 in	1760	--	°F	
0.030 in	1710	--	°F	
0.06 in	1430	--	°F	
0.12 in	1380	--	°F	
Oxygen Index	33	--	%	

### Processing Information

<b>Injection</b>	<b>Dry Unit</b>		
Drying Temperature	167 to 185 °F		
Drying Time	2.0 to 4.0 hr		
Dew Point	< -22 °F		
Suggested Max Moisture	0.12 %		
Rear Temperature	500 to 518 °F		
Middle Temperature	509 to 527 °F		
Front Temperature	509 to 527 °F		
Mold Temperature	140 to 176 °F		

#### 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.

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 10°C/min

