

TECHNYL STAR® AF 60SX V30 GY 7035 LPU

DOMO Engineering Plastics - Polyamide 66

General Information

Product Description

TECHNYL STAR AF 60SX V30 GREY 7035 LPU is a polyamide 66 based on a non halogenated flame retardant system, reinforced with 30% of glass fiber, for injection moulding. This grade offers, in addition to a high flow matrix and a good combination of fire properties, the particularity to decrease the level of blooming/exudation phenomena during the life time of the application.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Additive	• Flame Retardant		
Features	• Flame Retardant • Halogen Free • High Flow	• Low (to None) Phosphorus Content • Low Blooming • Low Halogen Content	• Outstanding Surface Finish
Uses	• Connectors	• Electrical/Electronic Applications	
Agency Ratings	• EC 1907/2006 (REACH)	• UL 94	
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA66-GF30 FR(40)		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.46	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.0	--	%	
Flow	0.30	--	%	
Water Absorption (24 hr, 73°F)	0.70	--	%	ISO 62
Water Absorption (Saturation, 73°F)	4.1	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.57E+6	1.16E+6	psi	ISO 527-1
Tensile Stress (Break)	15200	10900	psi	ISO 527-2
Tensile Strain (Break)	1.5	2.5	%	ISO 527-2
Impact	Dry	Conditioned	Unit	Test Method
Charpy Unnotched Impact Strength (73°F)	16	16	ft·lb/in²	ISO 179/1eU
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	504	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	469	--	°F	ISO 75-2/A
Melting Temperature ²	505	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Electric Strength	940	--	V/mil	IEC 60243-1
Comparative Tracking Index (CTI)	PLC 0	--		IEC 60112
Comparative Tracking Index	600	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.0394 in)	< 3.9	--	in/min	FMVSS 302
Flame Rating				UL 94
0.030 in	V-0	--		
0.06 in	5VA	--		



0.12 in	5VA	--	
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 (0.030 in)	1380	--	°F IEC 60695-2-13
Oxygen Index	33	--	%

Processing Information

Injection	Dry Unit
Drying Temperature	176 °F
Suggested Max Moisture	0.12 %
Rear Temperature	500 to 518 °F
Middle Temperature	509 to 527 °F
Front Temperature	509 to 536 °F
Mold Temperature	140 to 194 °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

¹ Typical properties: these are not to be construed as specifications.
² 10°C/min

