

TECHNYL® MAX AX 219 V50 BK

DOMO Engineering Plastics - Polyamide 66 Alloy

General Information

Product Description

*Previously TECHNYL AX 219S V50 BK

TECHNYL MAX AX 219 V50 BK (TECHNYL AX 219S V50 BK) is a high performance structural grade, with high stiffness and good surface finish.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Good Surface Finish • Heat Aging Resistant	• Heat Stabilized • High Stiffness	
Uses	• Automotive Applications • Consumer Applications	• Electrical/Electronic Applications • Industrial Applications	
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
Processing Method	• Injection Molding		
ISO Designation (ISO 16396)	• PA66-Alloy,GF50,MH,S14-190		
Resin ID (ISO 1043)	• PA66-Alloy,GF50		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.58	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.40 to 0.60	--	%	
Flow	0.10 to 0.30	--	%	
Water Absorption (24 hr, 73°F)	4.0	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.4	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	2.61E+6	2.47E+6	psi	ISO 527-1
Tensile Stress (Break)	36300	33400	psi	ISO 527-2
Tensile Strain (Break)	2.7	2.7	%	ISO 527-2
Flexural Modulus	2.39E+6	2.18E+6	psi	ISO 178
Flexural Stress	56600	50800	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	5.7	5.7	ft·lb/in ²	
73°F	6.7	6.7	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	40	40	ft·lb/in ²	
73°F	40	40	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	491	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	464	--	°F	ISO 75-2/A
Vicat Softening Temperature	455	--	°F	ISO 306
Melting Temperature ²	500	--	°F	ISO 11357-3



Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+14	--	ohms	IEC 62631-3-2
Volume Resistivity	1.0E+16	--	ohms·m	IEC 62631-3-1
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.0394 in)	< 3.9	--	in/min	FMVSS 302
Flame Rating (0.030 in)	HB	--		UL 94

Processing Information

Injection	Dry	Unit
Drying Temperature	167 to 185	°F
Drying Time	2.0 to 4.0	hr
Dew Point	< -22	°F
Suggested Max Moisture	0.20	%
Rear Temperature	536 to 554	°F
Middle Temperature	545 to 563	°F
Front Temperature	545 to 581	°F
Processing (Melt) Temp	536 to 581	°F
Mold Temperature	194 to 248	°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

