

TECHNYL® MAX AX 219S V50 BK B

DOMO Engineering Plastics - Polyamide 66 Alloy

General Information

Product Description

TECHNYL MAX AX 219S V50 BK B is a high performance structural grade, with high stiffness and good surface finish. For America availability only.

General

Material Status	• Commercial: Active
Availability	• Latin America • North America
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight
Features	• Good Surface Finish • High Stiffness • Low Warpage
Uses	• Automotive Applications • Electrical/Electronic Applications • Consumer 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	1.60	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.60 to 0.70	--	%	
Flow	0.050 to 0.15	--	%	
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	2.62E+6	2.13E+6	psi	ISO 527-1
Tensile Stress (Break)	37100	27400	psi	ISO 527-2
Tensile Strain (Break)	2.5	3.3	%	ISO 527-2
Flexural Modulus	2.30E+6	1.96E+6	psi	ISO 178
Flexural Stress	55100	43500	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	7.6	7.8	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	40	40	ft·lb/in ²	
73°F	47	41	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	496	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	478	--	°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
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.				

