

TECHNYL® MAX AX 219 RC40 BK

DOMO Engineering Plastics - Polyamide 66 Alloy

General Information

Product Description

*Previously TECHNYL XA 2340 BK

TECHNYL MAX AX 219 RC40 BK is a high performance structural grade, designed to be used in moulded part requiring very high stiffness and low density.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Carbon Fiber, 40% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Good Surface Finish	• Heat Stabilized	
	• Heat Aging Resistant	• High Stiffness	
Uses	• Automotive 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,CF40,MH,S14-220		
Resin ID (ISO 1043)	• PA66-Alloy,CF40		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.34	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.30 to 0.50	--	%	
Flow	0.050 to 0.10	--	%	
Water Absorption (24 hr, 73°F)	0.70	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.9	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	4.79E+6	4.13E+6	psi	ISO 527-1
Tensile Stress (Break)	43500	37000	psi	ISO 527-2
Tensile Strain (Break)	1.5	1.6	%	ISO 527-2
Flexural Modulus	3.77E+6	3.19E+6	psi	ISO 178
Flexural Stress	63800	50800	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F)	4.3	--	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	24	24	ft·lb/in ²	
73°F	29	29	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Melting Temperature ²	500	--	°F	ISO 11357-3
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.0394 in)	< 3.9	--	in/min	FMVSS 302
Flame Rating (0.06 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	554 to 572 °F
Front Temperature	563 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

