

TECHNYL® PROTECT A 50X2 NC XB

DOMO Engineering Plastics - Polyamide 66/6 Copolymer

General Information

Product Description

*Previously DOMAMID FR 66/6V0M

Polyamide 66/6, heat-aging stabilized, halogen and red phosphorus free flame retardant, for injection moulding, natural color

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Flame Retardant	• Heat Stabilizer	
Features	• Flame Retardant • Halogen Free	• Heat Aging Resistant • Heat Stabilized	• Low (to None) Phosphorus Content
Uses	• Electrical/Electronic Applications		
Agency Ratings	• UL 94		
RoHS Compliance	• RoHS Compliant		
Processing Method	• Injection Molding		
ISO Designation (ISO 16396)	• PA66/6,FR(30),MH,S14-040		
Resin ID (ISO 1043)	• PA66/6 FR(30)		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.16	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.0 to 1.2	--	%	
Flow	1.0 to 1.2	--	%	
Water Absorption (24 hr, 73°F)	1.8 to 1.9	--	%	ISO 62
Water Absorption (Saturation, 73°F)	9.1	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	3.2 to 3.3	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	522000	232000	psi	ISO 527-1
Tensile Stress (Yield)	11600	6530	psi	ISO 527-2
Tensile Strain (Break)	15	50	%	ISO 527-2
Flexural Modulus	479000	210000	psi	ISO 178
Flexural Stress	17400	7980	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	1.7	--	ft·lb/in ²	
73°F	1.9	4.3	ft·lb/in ²	
Charpy Unnotched Impact Strength (73°F)	38	-0.48	ft·lb/in ²	ISO 179/1eU
Notched Izod Impact Strength (73°F)	1.7	4.3	ft·lb/in ²	ISO 180/1A
Unnotched Izod Impact Strength (73°F)	33 ft·lb/in ²	No Break		ISO 180/1U
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)	167	--	°F	ISO 75-2/A
Vicat Softening Temperature	419	--	°F	ISO 306
Melting Temperature ²	504	--	°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



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
0.016 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
0.016 in	1760	--	°F	
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	1760	--	°F	
0.06 in	1560	--	°F	

Processing Information

Injection	Dry Unit
Drying Temperature	167 to 185 °F
Drying Time	2.0 to 4.0 hr
Dew Point	< -22 °F
Processing (Melt) Temp	500 to 536 °F
Mold Temperature	140 to 176 °F

Notes

¹ Typical properties: these are not to be construed as specifications.

² 10°C/min

