TECHNYL® PROTECT A 50X2 BK XB

DOMO Engineering Plastics - *Polyamide 66 + PA 6*

General Information

Product Description

*Previously DOMAMID FR 66/6V0M BKXB

TECHNYL A 50X2 BK XB is an unreinforced flame retardant polyamide blend of polyamide 6.6 and 6, heat stabilized, for injection moulding. This halogen free flame retardant grade is UL94 V0 at 0,4mm and offers good Glow Wire and CTI performances.

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	• EC 1907/2006 (REACH)	• UL 94	
RoHS Compliance	• RoHS Compliant		
Processing Method	• Injection Molding		
ISO Designation (ISO 16396)	• PA66+PA6,FR(30),,S14-040		
Resin ID (ISO 1043)	• PA66+PA6 FR(30)		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.16	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.0 to 1.2	--	%	
Flow	1.0 to 1.2	--	%	
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	479000	218000	psi	ISO 527-1
Tensile Stress (Yield)	10200	5800	psi	ISO 527-2
Tensile Strain (Break)	13	45	%	ISO 527-2
Flexural Modulus	392000	160000	psi	ISO 178
Flexural Stress	14500	6530	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F)	1.9	4.3	ft·lb/in²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	29	-0.48	ft·lb/in²	ISO 179/1eU
Notched Izod Impact Strength (73°F)	1.9	4.3	ft·lb/in²	ISO 180/1A
Unnotched Izod Impact Strength (73°F)	19 ft·lb/in²	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

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