

TECHNYL® PROTECT AT 20 V25 P BK 9190

DOMO Engineering Plastics - Polyethylene Terephthalate + PA 66

General Information

Product Description

*Previously DOMAMID FR 66G25V0P1A BK99190

Polyamide 66/PET, 25% glass fiber reinforced, heat-aging stabilized, red phosphorous flame retardant, for injection moulding

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight		
Additive	• Flame Retardant	• Heat Stabilizer	
Features	• Flame Retardant	• Heat Aging Resistant	• Heat Stabilized
Uses	• Electrical/Electronic Applications		
Agency Ratings	• UL 94		
RoHS Compliance	• RoHS Compliant		
Processing Method	• Injection Molding		
ISO Designation (ISO 16396)	• PA66+PET,GF25FR(52),MH,S14-080		
Resin ID (ISO 1043)	• PA66+PET-GF25 FR(52)		

 Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.36	--	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (275°C/5.0 kg)	28	--	cm ³ /10min	ISO 1133
Molding Shrinkage				ISO 294-4
Across Flow	0.90 to 1.1	--	%	
Flow	0.40 to 0.60	--	%	
Viscosity Number (96% H ₂ SO ₄ (Sulphuric Acid))	145	--	cm ³ /g	ISO 307
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.23E+6	899000	psi	ISO 527-1
Tensile Stress (Break)	21800	16000	psi	ISO 527-2
Tensile Strain (Break)	3.5	5.0	%	ISO 527-2
Flexural Modulus	1.09E+6	812000	psi	ISO 178
Flexural Stress	30500	23200	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F)	4.8	7.1	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	33	36	ft·lb/in ²	ISO 179/1eU
Notched Izod Impact Strength (73°F)	4.3	6.7	ft·lb/in ²	ISO 180/1A
Unnotched Izod Impact Strength (73°F)	26	31	ft·lb/in ²	ISO 180/1U
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	482	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	446	--	°F	ISO 75-2/A
Vicat Softening Temperature	473	--	°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 1	--		IEC 60112
Comparative Tracking Index	575	--	V	IEC 60112



Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.0394 in)	< 3.9	--	in/min	FMVSS 302
Flame Rating				UL 94
0.030 in	V-0	--		
0.06 in	V-0	--		
0.12 in	V-0	--		
Oxygen Index	27	--	%	

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	518 to 554 °F
Mold Temperature	176 to 212 °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

