

TECHNYL® PROTECT A 20 V25 P BK

DOMO Engineering Plastics - Polyamide 66

General Information

Product Description

*Previously DOMAMID FR 66G25V0P1 501 BK

Polyamide 66, 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 • Halogen Free • Heat Stabilized
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,GF25FR(52),MH,S14-080
Resin ID (ISO 1043)	• PA66-GF25 FR(52)

 Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.35	--	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (275°C/5.0 kg)	30	--	cm ³ /10min	ISO 1133
Molding Shrinkage				ISO 294-4
Across Flow	0.90 to 1.1	--	%	
Flow	0.40 to 0.60	--	%	
Water Absorption (24 hr, 73°F)	0.70 to 0.80	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.23E+6	943000	psi	ISO 527-1
Tensile Stress (Break)	21000	15200	psi	ISO 527-2
Tensile Strain (Break)	3.0	4.5	%	ISO 527-2
Flexural Modulus	1.09E+6	841000	psi	ISO 178
Flexural Stress	28300	21800	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F)	5.7	8.1	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	29	33	ft·lb/in ²	ISO 179/1eU
Notched Izod Impact Strength (73°F)	5.2	7.6	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 (0.030 in)	V-0	--		UL 94

Processing Information

Injection	Dry Unit
Drying Temperature	176 °F
Suggested Max Moisture	0.20 %
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

