

PROPERTY DATA

Stanyl®



Nylon 46

45% Glass Reinforced,
Heat Stabilized,
Flame Retardant

Stanyl TE250F9

MECHANICAL PROPERTIES*		Unit	Test Method	TE250F9	
				DAM	Conditioned
Tensile Strength	23 °C (73 °F)	MPa (Kpsi)	ISO 527	200 (29.0)	130 (18.9)
	120 °C (248 °F)	MPa (Kpsi)	ISO 527	130 (18.9)	-
	160 °C (320 °F)	MPa (Kpsi)	ISO 527	120 (17.4)	-
Tensile Elongation, Break		%	ISO 527	2.0	3.0
Flexural Modulus	23 °C (73 °F)	MPa (Kpsi)	ISO 178	15,000 (2,180)	11,000 (1,595)
	120 °C (248 °F)	MPa (Kpsi)	ISO 178	10,500 (1,523)	-
	160 °C (320 °F)	MPa (Kpsi)	ISO 178	9,000 (1,305)	-
Izod Impact Strength	23 °C (73 °F)	kJ/m ² (ft-lbs/in)	ISO 180/1A	13 (2.0)	15 (2.2)
	-40 °C (-40 °F)	kJ/m ² (ft-lbs/in)	ISO 180/1A	13 (2.0)	13 (2.0)

PHYSICAL PROPERTIES*					
Density		g/cm ³	ISO 1183	1.82	
Water Absorption, 24 Hours		%	ISO 62	0.5	
Water Absorption, Equilibrated at 50% R.H.		%	ISO 62	1.2	
Mold Shrinkage, > 2 mm thickness		%	ISO 2577	with flow	cross flow
Mold Shrinkage, < 2 mm thickness		%		0.2 - 0.4	0.6 - 1.2
CLTE, +23 to +80°C		E-05 /°C	DSM	2	8
CLTE, +80 to +180°C		E-05 /°C		3	8.5

THERMAL / FLAMMABILITY PROPERTIES*					
Continuous Use Temperature, (2,500 hrs) (5,000 hrs) (10,000 hrs)		°C (°F)	IEC 216	175 (347)	
				163 (325)	
				151 (304)	
Melt Point		°C (°F)	DSM	295 (563)	
Heat Deflection Temperature @ 1.8 MPa		°C (°F)	ISO 75	290 (554)	
UL Classification		UL94 (mm)	UL94	V0 (0.8)	

*DAM = Dry-As-Molded. Conditioned = Conditioned to equilibrium in a 50% relative humidity atmosphere. CLTE = Coeff. of Linear Thermal Expansion. December 30, 2000

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