TECAMID™ ST

Polyamide 66

Ensinger Inc.

Message:

Nylon was the first engineering resin. It has been used in applications ranging from electronic, marine, and automotive industries to fibers used to make carpet. Nylon has outstanding wear resistance and low frictional properties. It has very good temperature, chemical, and impact properties. However, nylon's one weakness is a propensity to absorb moisture and thus have poor dimensional stability.
TECAMID® has an excellent balance of properties which make it an ideal material for metal replacement in applications such as automotive parts, industrial valves, railway tie insulators, and other industry uses whose design requirements include high strength, toughness, and weight reduction.
Type 6/6 nylon. Super Tough nylon. Increased impact resistance and toughness over Tecamid® 6/6.

General Information			
Features	Low friction coefficient		
	High strength		
	Impact resistance, good		
	Good chemical resistance		
	Good wear resistance		
	Good toughness		
Uses	Valve/valve components		
	Industrial application		
	Metal substitution		
	Application in Automobile Field		
Forms	Shapes		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.08	g/cm³	ASTM D792
Water Absorption			ASTM D570
23°C, 24 hr	1.2	%	ASTM D570
Saturated, 23°C	6.7	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale, 23°C)	112		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1690	MPa	ASTM D638
Tensile Strength (Yield, 23°C)	49.6	MPa	ASTM D638
Tensile Elongation (Break, 23°C)	60	%	ASTM D638
Flexural Modulus (23°C)	1590	MPa	ASTM D790
Flexural Strength (23°C)	62.1	MPa	ASTM D790
Coefficient of Friction [1] (vs. Itself - Dynamic)	0.28		ASTM D1894
Wear Factor [2] (0.28 MPa, 0.25 m/sec)	400	10^-8 mm³/N·m	ASTM D3702
Impact	**Nominal Value**	**Unit**	**Test Method**

Unnotched Izod Impact (23°C)	910	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, not annealed	132	°C	ASTM D648
1.8 MPa, not annealed	63.9	°C	ASTM D648
Melting Temperature	263	°C	ASTM D2133
CLTE - Flow	1.2E-4	cm/cm/°C	ASTM D696
Flammability	**Nominal Value**		**Test Method**
Flame Rating (0.810 mm)	HB		UL 94
Additional Information			
Data obtained from extruded shapes material.			
NOTE			
1.	40 psi, 50 fpm		
2.	Against Steel		

Recommended distributors for this material

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