

TES J-4/35
Techmer Polymer Modifiers - Polyamide 612
General Information
General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight
Features	• Chemical Resistant • Good Stiffness • High Strength • Good Impact Resistance • High Heat Resistance • Low Moisture Absorption
Uses	• Automotive Under the Hood • Fuel Lines • Knobs • Bearings • Furniture • Pulleys • Bushings • Gears • Sporting Goods • Cams • Handles • Valves/Valve Parts • Electrical Parts • Housings • Wheels/Casters
RoHS Compliance	• RoHS Compliant
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.34		ASTM D792
Molding Shrinkage - Flow	2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.20	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.40E+6	psi	ASTM D638
Tensile Strength (Yield)	25000	psi	ASTM D638
Tensile Elongation (Yield)	5.0	%	ASTM D638
Flexural Modulus	1.35E+6	psi	ASTM D790
Flexural Strength (Yield)	36000	psi	ASTM D790
Compressive Strength	23000	psi	ASTM D695
Shear Strength	9500	psi	ASTM D732
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	2.5	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (E-Scale)	40		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	410	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	390	°F	ASTM D648
CLTE - Flow	1.4E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+14	ohms	ASTM D257
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength	500	V/mil	ASTM D149
Dielectric Constant			ASTM D150
1 kHz	3.70		
1 MHz	3.40		
Dissipation Factor			ASTM D150
1 kHz	0.024		
1 MHz	0.016		

Processing Information


Injection	Nominal Value	Unit
Drying Temperature	165 to 220	°F
Drying Time	2.0 to 16	hr
Rear Temperature	520 to 540	°F
Middle Temperature	530 to 550	°F
Front Temperature	510 to 530	°F
Nozzle Temperature	500 to 520	°F
Processing (Melt) Temp	520 to 540	°F
Mold Temperature	130 to 180	°F

Notes

¹ Typical properties: these are not to be construed as specifications.

