AN EOS COMPANY

HP 11-32 FE

NYLON 11

A well suited material where the application requires superior thermal strength in the X, Y, and Z dimensions. The material offers high stiffness and high tensile strength. Excellent material for Wind Tunnel models and under the hood automotive applications.

HIGHLIGHTS

- → Isotropic Properties
- → Melt compounded Carbon Fiber filled PA11 with Dry-Mixed fibers
- → High stiffness, high tensile strength
- → Electrostatically dissipative

APPLICATIONS

- → Under hood components
- → Wind tunnel display models
- → Well suited to applications which require superior thermal properties, with maximum performance and consistent properties in XY&Z dimensions

HEADQUARTERS

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TYPICAL PHYSICAL PROPERTIES			
PROPERTY	**TEST METHOD**	**IMPERIAL**	**METRIC**
Color/Appearance	Visual	Dark Gray	Dark Gray
Bulk Density	ASTM D792	0.0387 lb/in^3	1.07 g/cm^3
Elongation at Break	ASTM D638	7%	7%
Heat Detection Temperature @ 264 psi	ASTM D648	289°F	143°C
Heat Detection Temperature @ 66 psi	ASTM D648	347°F	175°C
Izod Impact Strength (method A, notched)	ASTM D256	1.02 ft-lb/in	54 J/m
Tensile Modulus	ASTM D638	450,000 psi	3,100 MPa
Tensile Strength	ASTM D638	7,000 psi	48 MPa
Coefficient of Thermal Expansion: 77-212°F (25 -100°C)	ASTM E831	124.5 µin/in °F	224.1 µm/m °C
Coefficient of Thermal Expansion: 212-338°F (100-170°C)	ASTM E831	176.6 µin/in °F	317.9 µm/m °C
Volume Resistance	-	6.0E+02 - 7.8E+03 ohms-cm	-
Surface Resistance	-	2.9E+10 - 3.2E+10 ohms	-
Voltage Field	-	< 50 volts	-
Heat Deflection Temperature	ASTM D648	343°F @ 264 psi	173°C @ 1.82 MPa