

**TABLE 1**

**Polyamide-11 performance**

<b>Feature</b>	<b>Performance</b>	<b>Test protocol</b>	<b>Application/Industry</b>
Adhesion	≥ 8	ASTM D-6677	All industries and applications
Corrosion resistance	No corrosion More than 2,000 hours salt fog	ASTM B-117	Appliance wire forms Water industry Automotive industry Marine environments Oil/gas transport
Chemical resistance	Water (e.g., sea, raw) Crude petroleum Gasoline, motor oils, greases Inorganic acids/bases Organic acids/bases Organic compounds Solvents/alcohols Household cleaners and detergents Food products	No blistering or swelling after immersion for 18 months	Appliance wire forms Water industry Automotive industry Marine environments Oil/gas transport
Abrasion resistance	Less than 14 milligrams for 1,000 cycles Taber abraser (CS-17 wheel, 1,000 grams)	ASTM D-4060	Automotive industry Oil/gas transport
Impact resistance	More than 160 inch-pounds	ASTM D-2794	Appliance wire forms Water industry Automotive industry Marine environment Oil/gas transport
Cavitation erosion resistance	Less than 0.7 micron /hour (contrast with thermoset epoxy at more than 20 microns/hour)	ASTM G-32	Water industry Oil transport
Machinability	Excellent	—	Rollers (printing and water treatment) Automotive industry
Water absorption to saturation	1.6 - 1.9%	68°F and 100% RH	All industries and applications
Coefficient of friction	0.10 - 0.30	ASTM D-1894	Automotive industry
Flexibility	No cracking on conical mandrel	ASTM D-522	Appliance wire forms Automotive industry Furniture
Tensile strength at break	≥ 5,600 pounds per square inch	ASTM D-638	Appliance wire forms Automotive industry
Specific gravity	1.04 - 1.11 grams/cubic centimeter	ASTM D-792 (68°F)	All industries and applications (minimizes powder consumption)
Hardness	75	Shore D	Appliance wire forms
Dielectric strength	9,000 to 40,000 volts/millimeter (depends upon formulation)	—	Electrical components

\* This information came from the September 2005 issue of Powder Coating Magazine.