

Material Selection Guide

Resins:	Generic Names:	Trade Names:	Description:	Examples:	Average Cost:
PP	Polypropylene		Scratch resistant lightweight Living hinges Extremely high chemical resistance	Milk bottles End caps Bottles	0.50 to 1.25 \$/lb
PMMA	Acrylic	Lucite Plexiglas	Transparent or opaque	Display stands	1.00 to 2.00 \$/lb
ABS	Acrylonitrile, Butadiene, Styrene	Cycolac	Strong, flexible uses rubber as a filler	Toys, automotive, gauges, and boxes	1.00 to 3.50 \$/lb
PA6/6	Nylon 6/6	Zytel	Chemical resistant & strong	Chain saws connectors housings Zip ties	2.50 to 3.75 \$/lb
AC	Acetal	Delrin Celcon	Wear resistant	Slide guides Rotors	2.50 to 4.00 \$/lb
PC	Polycarbonate	Lexan	Bullet proof	Safety shields	3.00 to 7.00 \$/lb
PBT / PET	Polyester	Valox	Withstands high heat	Valves	2.75 to 7.00 \$/lb
PPS	Polyphenylene sulfide	Ryton Fortron	Possesses many properties of Thermoset materials, i-e. Dielectric, heat resistance, etc. Withstands the highest heat	Often replaces Thermoset in some cases Covers, switches, and shields	4.00 to 9.00 \$/lb
PEI PEI+PC		Ultem	Possesses many properties of Thermoset materials, i-e. Dielectric, heat resistance, etc.	Often replaces Thermoset in some cases. Surgical tools Covers, switches, and shields	8.00 to 15.00 \$/lb
PEEK	Polyetheretherketone		Chemical resistant & strong	Aerospace Mil-Spec connectors	30.00 to 90.00 \$/lb