Thermoplastic Fiber	Denier/ Filament	Spec Grav g/cc	Tg F/C	Tm F/C	Process Temp F and C	Relative Cost	Key Features	Fiber Applications
PEEK	900/68	1.30	289F 143C	649F 343C	680-780F 360-420C	$$$	High Temperature, Thermal Stability, Abrasion Resistance, Superior Chemical Resistance, Flame retardency, High Stiffness and Low density	Aerospace, Oil Exploration
PPS	1300/96	1.33	194F 90C	536F 228C	580-650F 304-343C	$$	High Temperature, Chemical Resistance, Flame Retardency, Dimensional Stability, Low Moisture Absorption	Aerospace and Transportation
PEI (Ultem)	1000/72	1.27	423F 217C	662F 350C	698-752F 370-400C	$$	High Thermal Stability, Low Flame and Smoke, similar to PEEK but lower temp resistance and impact strength.	Aerospace and Transportation
PVDF (Kynar)	1280/128	1.78	-31F -35C	340F 171C	370-446F 190-230C	$$	High thermal stability, low flame and smoke characteristics, High Chemical Resistance, Low permeability	Aerospace and Transportation
Nylon 12	800/72	1.02	104F 40C	355F 179C	384-444F 195-230C	$$	Lower moisture regain and lower melting point than Nylon 6, Good resistance to shock and chemicals.	Industrial & Transportation
Nylon 6	900/72	1.14	140F 60C	428F 220C	464-554F 240-290C	$	Good Price/Performance Ratio, Good Chemical Resistance, High Strength.	Sporting Goods, Industrial, Automotive
Polyester	900/72	1.38	167/65	475/246	518-572F 270-300C	$	High Chemical Resistance, Low Moisture Regain.	Multiple
Polypropylene	700/72	0.90	14/-10	340/171	374-482F 190-250C	$	Low Melting Point, Excellent Moisture Resistance.	Automotive, Consumer Goods