How Do Parflex Plastics Stack Up Against Each Other for Laboratory Applications?

Attributes	High lubricity Best coefficient of friction Unmatched chemical resistance						Widest temperature range Best flexibility at low temperatures Thermal stability at high temperatures					
Material	**PTFE**	**FEP**	**PFA**	**Nylon**			**Polyethylene**			**Polypropylene**	**Polyurethane**	
Series	101, 201,	103, 203	104, 204	N/NB	PAT	NR	E/EB	PEFR	HDPE	PP/PPB	95U/95UM	95FR
Temperature Range	500°F (260°C) 100°F (-73°C)	400°F (204°C) 100°F (-73°C)	500°F (260°C) 100°F (-73°C)	200°F (93°C) -65°F (-54°C)	200°F (93°C) -70°F (-57°C)	200°F (93°C) -60°F (-51°C)	150°F (66°C) -80°F (-62°C)	150°F (66°C) -85°F (-65°C)	175°F (80°C) -80°F (-62°C)	200°F (93°C) 0°F (-18°C)	180°F (82°C) -40°F (-40°C)	165°F (75°C) -40°F (-40°C)
Size Range O.D. inch metric	3/16" to 1.1" 3, 4, 5, 6, 7, 8, 9, 10, 12	3/16" to 1" 3, 4, 5, 6, 7, 8, 9, 10, 12	3/16" to 1" 4, 6, 8, 10, 12	1/8" to 1/2" 4, 6, 8, 10, 12, 14, 16, 18, 20	1/8" to 3/4" -	1/8" to 1/2" -	1/4" to 5/8" 6, 8, 10, 12	5/32" to 1/2" -	1/4" to 3/8" -	1/8" to 5/8" -	1/8" to 3/4" 4, 6, 8, 10, 12	1/4" to 1/2" 6, 8, 10, 12
Styles	Fractional Metric	Fractional Metric	Fractional Metric	Semi-Rigid Flexible / Metric	Ultra Pure, UV Resistant	Semi Rigid High Strength	Instrument UV Resistant	Flame Resistant	High Density	Laboratory Grade UV Resistant	Fractional Metric	Flame Resistant
Certification/ Compliance	AMS 3653G (AWG) VW1 UL-83* FDA USP Class VI	ASTM D2116-07 VW1 UL-83* FDA USP Class VI	ASTM D3307-10 VW1 UL-83* FDA USP Class VI	-	-	-	NSF-51 NSF-61 ASTM D-1693 FDA	ASTM D-1693 UL94	-	NSF-51* FDA*	-	-
Color Range	Milky White (colors on request)	Clear (colors on request)	Clear, w/blue tint (colors on request)	Multiple Colors	Black, Brown, Silver	White Black	Multiple Colors	Black	Black	White Black	Multiple Colors	Multiple Colors
Flammability Rating UL-94	V-0	V-0	V-0	na	na	na	na	V-2	na	na	na	V-0
Typical Applications	**Use for extreme high and low temperatures and chemical or corrosive applications**			**Use for general tubing applications**								
	Fluid transfer Chemical processing Pneumatic actuator lines Process cooling water Gas sampling Laboratory Electronics	Fluid transfer Instrumentation Food & Beverage UV applications Water and gas sampling Down hole pump Ozone sampling	Semiconductor Wet bench Dionized (DI) water Air & gas sampling Flow monitoring High purity applications Laboratory	Pneumatic and Petroleum based chemical transfer Robotics Machine tool General pneumatics Lubrication Pest control lines	Pure air and gas distribution systems Semiconductor	High-pressure pneumatics Low-pressure lubrication systems Marine control systems Process lines for chemicals and oils	Chemical transfer Low-pressure pneumatics Potable water	Pneumatic controls in HVAC	Chemical transfer Low-pressure pneumatics	Food contact* Chemical transfer Chlorinated water	Low and high-pressure pneumatics Robotics Machine tools Automation equipment Transporation (non-DOT)	Low to medium pressure air and water supply lines where weld spatter protection is needed Robotic welding End-of-arm tooling

*Natural