



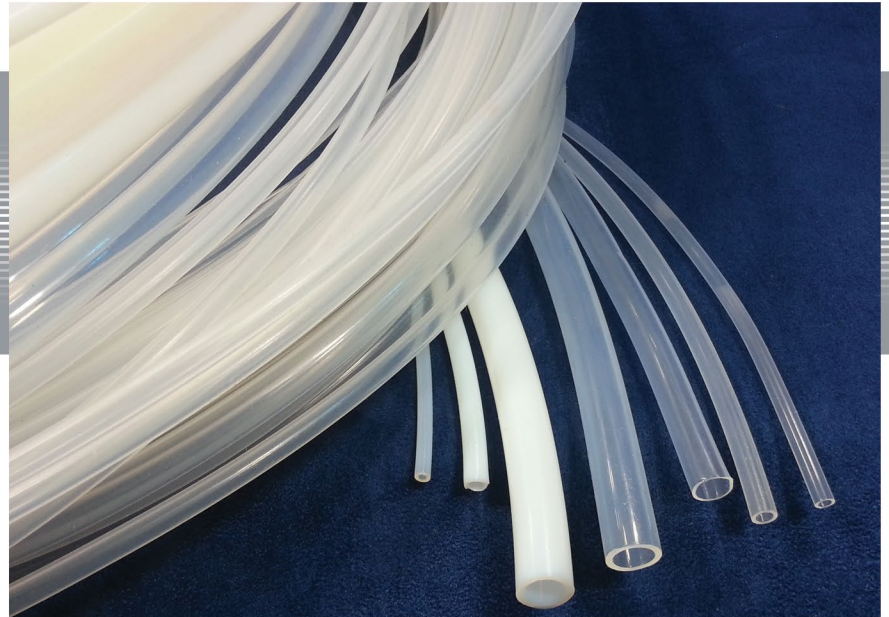
international polymer solutions

High Purity Tubing



IPS offers three types of **High Purity Tubing**. All three are classified as High Purity solutions for ultra-clean applications and are excellent with corrosive media.

These three tubing choices are UL 94 VO Flammability Rated. They resist combustion and do not promote flame spread. They are also approved for use in food contact applications in compliance with FDA regulation: 21 CFR 177.1550.



We process tubing orders in discrete increments of 5-ft lengths.

Polytetrafluoroethylene - PTFE Tubing

- 100% pure true virgin PTFE
- Flexible with extremely smooth ID and OD
- Bendable to form tight controlled flow paths
- Good for applications requiring lubricity
- Excellent High Temperature Performance
- Excellent Chemical Resistance & Biocompatibility
- Excellent Dielectric Insulation Properties
- Low Permeability
- Compatible with all conventional fittings

Fluorinated Ethylene-Propylene - FEP Tubing

- Flexible but will kink if bent too tightly
- Can be welded and sealed by melting
- Very tough material – can be rigorously cleaned
- For visual clarity FEP is an alternate to PTFE

Perfluoroalkoxy - PFA Tubing

- Thermoplastic which is virtually non-porous
- Tolerates tight bends (shape with hot air heat gun)
- Translucent with a Bluish Tint
- Accommodates extreme temperature ranges
- Similar to PTFE and more formable into shapes
- Can be welded and sealed by melting

Temperature Ratings

PTFE	-200°C/240°C	(-328°F/464°F)
FEP	-70°C/180°C	(-94°F/356°F)
PFA	-180°C/240°C	(-292°F/464°F)

PTFE TUBING

Part Number	OD Size	OD Tolerance	ID Size	ID Tolerance	Wall Thickness	Wall Tolerance
PTFE-125-030	1/8"	±.004	1/16"	±.004	.030"	±.005
PTFE-250-030	1/4"	±.004	3/16"	±.004	.030"	±.008
PTFE-250-062	1/4"	±.004	1/8"	±.004	.062"	±.008
PTFE-375-030	3/8"	±.005	5/16"	±.005	.030"	±.008
PTFE-375-062	3/8"	±.005	1/4"	±.005	.062"	±.008
PTFE-500-030	1/2"	±.006	7/16"	±.006	.030"	±.008
PTFE-500-062	1/2"	±.006	3/8"	±.006	.062"	±.008
PTFE-625-062	5/8"	±.007	1/2"	±.007	.062"	±.008
PTFE-750-062	3/4"	±.008	5/8"	±.008	.062"	±.008
PTFE-875-062	7/8"	±.009	3/4"	±.009	.062"	±.008
PTFE-1000-062	1"	±.010	7/8"	±.010	.062"	±.008

PFA TUBING

Part Number	OD Size	OD Tolerance	ID Size	ID Tolerance	Wall Thickness	Wall Tolerance
PFA-125-030	1/8"	±.004"	1/16"	±.004"	.030"	±.005"
PFA-188-030	3/16"	±.005"	1/8"	±.005"	.030"	±.005"
PFA-250-030	1/4"	±.005"	3/16"	±.005"	.030"	±.005"
PFA-250-062	1/4"	±.005"	1/8"	±.005"	.062"	±.005"
PFA-313-030	5/16"	±.006"	1/4"	±.006"	.030"	±.005"
PFA-375-030	3/8"	±.007"	5/16"	±.007"	.030"	±.005"
PFA-375-062	3/8"	±.007"	1/4"	±.007"	.062"	±.006"
PFA-500-030	1/2"	±.009"	7/16"	±.009"	.030"	±.006"
PFA-500-062	1/2"	±.009"	3/8"	±.009"	.062"	±.006"
PFA-625-030	5/8"	±.010"	9/16"	±.010"	.030"	±.006"
PFA-625-062	5/8"	±.010"	1/2"	±.010"	.062"	±.006"

FEP TUBING

Part Number	OD Size	OD Tolerance	ID Size	ID Tolerance	Wall Thickness	Wall Tolerance
FEP-250-030	1/4"	±.005"	3/16"	±.005"	.030"	±.007"
FEP-250-047	1/4"	±.005"	5/32"	±.005"	.047"	±.007"
FEP-250-062	1/4"	±.005"	1/8"	±.005"	.062"	±.007"
FEP-313-062	5/16"	±.005"	3/16"	±.005"	.062"	±.007"
FEP-375-030	3/8"	±.005"	5/16"	±.005"	.030"	±.007"
FEP-375-062	3/8"	±.005"	1/4"	±.005"	.062"	±.007"
FEP-500-030	1/2"	±.005"	7/16"	±.005"	.030"	±.008"
FEP-500-062	1/2"	±.005"	3/8"	±.005"	.062"	±.008"
FEP-1000-062	1.00"	±.010"	7/8"	±.010"	.062"	±.007"
FEP-1125-062	1-1/8"	±.010"	1"	±.010"	.062"	±.008"

Tubing Tensile Strength (psi)			Derate Factor
PTFE	1800 @ 20°C	300 @ 240°C	6.82 psi/°C
FEP	2000 @ 20°C	200 @ 180°C	11.25 psi/°C
PFA	4000 @ 20°C	900 @ 240°C	14.09 psi/°C

Pressure Ratings
To estimate the allowable pressure rating please use the following formula: OP = W*T/I
Where:
OP = Operating Pressure (psi)
W = Wall Thickness (inch)
T = Tensile Strength (psi)
I = Inside Diameter (inch)

IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications.
3. With industry common practices the original factory one-year warranty applies.
4. For further details please contact your local Distributor or our factory directly.