

Industrial fluoropolymer sourcing

# Pure-Flon Fluoropolymer Tubing Catalog

Use this catalog to shortlist PTFE, PFA, FEP, flexible hose, fittings, and spaghetti tubing before sending an RFQ through [pure-flon.com/quote](https://pure-flon.com/quote).

## PTFE

65 deg C - 260 deg C

## PFA

65 deg C - 260 deg C

## FEP

65 deg C - 205 deg C



### Buyer path

Download, review, and send one RFQ-ready technical brief through [pure-flon.com/quote](https://pure-flon.com/quote).

# RFQ Buyer Path

Start with the application environment, then narrow the material and dimension path.

| Buyer action       | What to prepare   | Pure-Flon review output   |
|--------------------|---|---|
| Shortlist material | Media, temperature, pressure, transparency, static and clean-handling needs.    | Material family recommendation and constraints to verify.                                 |
| Confirm dimensions | ID, OD, wall thickness, tolerance target, bend radius and length.               | Metric or inch sizing review plus manufacturing feasibility notes.                        |
| Request quote      | Application environment, quantity, preferred lead time and destination country. | RFQ response path through <a href="https://pure-flon.com/quote">pure-flon.com/quote</a> . |

Do not start with a generic catalog request. A short environment-first note lets the first reply move toward feasibility, not clarification.

# Material Family Matrix

Use this sourcing map before choosing a detailed tube, hose or fittings path.

| Family                 | Best-fit sourcing signal   | Reference temperature window | Buyer note   |
|------------------------|--|------------------------------|--|
| PTFE Tubing            | Chemical resistance, broad heat resistance and low-friction service. | 65 deg C - 260 deg C         | Use when durability matters more than visual flow inspection.  |
| PFA Tubing             | High transparency, purity and high-temperature chemical routing.     | 65 deg C - 260 deg C         | Use when visible clean flow and resistance are both important. |
| FEP Tubing             | Transparent non-stick routing with a lower upper temperature range.  | 65 deg C - 205 deg C         | Use for visual checks, low adhesion and moderate heat windows. |
| Flexible Hose          | Assembly paths with bend, routing and pressure review.               | Application-dependent        | Send bend radius, pressure and connection constraints.         |
| Fittings & Accessories | Connector matching, assemblies and system compatibility.             | Application-dependent        | Send tube dimensions, media and connection method.             |

# PTFE, PFA and FEP Tubing

Three fluoropolymer paths cover durability, visual inspection, non-stick handling and high-temperature chemical routing.

|  |   |
|--|---|
| <b>PTFE Tubing</b><br>Chemical resistance and heat stability | Reference operating temperature window: 65 deg C - 260 deg C.<br>Core advantages: chemical resistance, heat resistance, low friction and electrical insulation.<br>Best-fit formats: metric tubing, inch tubing, spaghetti tubing and application-specific wall ranges. |
| <b>PFA Tubing</b><br>High transparency and resistance        | Reference operating temperature window: 65 deg C - 260 deg C.<br>Useful for high-purity chemical routing when visible clean flow matters.<br>Start here when visual inspection and demanding thermal service both matter.   |
| <b>FEP Tubing</b><br>Non-stick and versatile routing         | Reference operating temperature window: 65 deg C - 205 deg C.<br>Useful for visual checks, non-stick surfaces and moderate operating temperature.<br>Use as a practical transparent option where PFA's upper heat range is not required.                                |

Important: pressure and dimensional data are reference inputs. Final values depend on application conditions, material grade and manufacturing review.

# PTFE Spaghetti Tubing Precision Specs

Small-bore dimensions copied into a buyer-ready shortlist table.

| Outer diameter | Inner diameter | Thickness | Tolerance |
|----------------|----------------|-----------|-----------|
| 0.8 mm         | 0.3 mm         | 0.25T     | 0.05 mm   |
| 1.0 mm         | 0.5 mm         | 0.25T     | 0.05 mm   |
| 1.3 mm         | 0.8 mm         | 0.25T     | 0.05 mm   |
| 1.5 mm         | 1.0 mm         | 0.25T     | 0.05 mm   |
| 2.0 mm         | 1.5 mm         | 0.25T     | 0.05 mm   |
| 2.5 mm         | 2.0 mm         | 0.25T     | 0.05 mm   |

Use case: insulation, compact routing, precision tolerance, and early custom-size feasibility checks.

# Metric PTFE/PFA Tubing Reference

Reference burst and working pressure values are room-temperature review inputs, not final application guarantees.

| OD mm | ID mm | Burst pressure kgf/cm2 | Working pressure kgf/cm2 | Tolerance mm | Min bend radius mm |
|-------|-------|------------------------|--------------------------|--------------|--------------------|
| 4     | 2     | 120                    | 98                       | 0.15         | 10                 |
| 4     | 2.5   | 100                    | 80                       | 0.15         | 13                 |
| 6     | 4     | 65                     | 52                       | 0.15         | 25                 |
| 8     | 6     | 45                     | 36                       | 0.15         | 45                 |
| 10    | 8     | 35                     | 28                       | 0.20         | 70                 |
| 12    | 10    | 30                     | 24                       | 0.20         | 105                |
| 14    | 12    | 24                     | 19                       | 0.20         | 140                |
| 16    | 14    | 18                     | 14                       | 0.30         | 140                |

Safety factor 4:1. Virgin PTFE/PFA. High-precision extrusion reference.

# Inch PTFE/PFA Tubing Reference

Use when matching existing inch-system equipment, fittings or maintenance inventory.

| OD inch | Wall | OD mm | ID mm | Burst kgf/cm2 | Working kgf/cm2 | Tol. mm | Min bend radius mm |
|---------|------|-------|-------|---------------|-----------------|---------|--------------------|
| 1/4     | 1.2T | 6.35  | 3.96  | 120           | 98              | 0.2     | 25                 |
| 3/8     | 1.5T | 9.5   | 6.5   | 100           | 80              | 0.2     | 40                 |
| 1/2     | 1.5T | 12.7  | 9.7   | 65            | 52              | 0.2     | 105                |
| 3/4     | 1.5T | 19    | 16    | 45            | 36              | 0.3     | 120                |
| 1       | 1.5T | 25.4  | 22.4  | 35            | 28              | 0.3     | 430                |

Reference standards: ASTM D3295 PTFE and ASTM D3307 PFA where applicable.

# Flexible Hose, Fittings and Accessories

Use this section when routing, assembly, connectors or system compatibility are the real buying constraint.

| Path                | What to send  | Review result                                   |
|---------------------|---|---|
| Flexible hose       | Routing geometry, bend radius, pressure, media and connection method.   | Material and assembly feasibility path.         |
| Fittings            | Tube OD/ID, thread or connection type, media and operating temperature. | Compatible fitting or accessory recommendation. |
| Assembly discussion | Destination country, quantity, lead time and inspection needs.          | RFQ-ready clarification set.                    |

For fittings and assemblies, include tube OD/ID, connection method, media, temperature, target country and inspection needs.

# RFQ Checklist and Contact Flow

The fastest quote path is a short technical brief. Use this checklist before sending the request.

| Required input          | Example detail   |
|-------------------------|--|
| Application environment | Chemical media, operating temperature, pressure and duty cycle.                    |
| Dimensional target      | ID, OD, wall thickness, tolerance, length, bend radius and quantity.               |
| Material signal         | PTFE, PFA, FEP, hose, fitting or unclear; Pure-Flon can help shortlist.            |
| Quality and handling    | Clean handling, packaging, transparency, static control or inspection requirement. |
| Commercial route        | Country, target date, sample need and preferred reply email.                       |

**Next step**      Send the RFQ through [pure-flon.com/quote](https://pure-flon.com/quote) and include the checklist details above.