PTFE TUBE

Product Description: Hoses made of PTFE raw materials have many excellent properties

- Weather resistance, corrosion resistance, and not easy to age
- Low surface friction coefficient and strong anti-adhesion
- Low chemical activity and resistant to various chemicals
- Excellent electrical properties
- High and low temperature resistance (-180 ~+260)
- Color: milky white

Application areas:

- Products are widely used in the aerospace industry
- Semiconductor, solar energy industry
- New energy industry
- Oil and gas industry
- Chemical industry
- Food and beverage industry
- Machinery industry
- Automobile and medical industry

Specifications:

Type	OD (mm)	ID (mm)	Wall Thickness (mm)	Length (mm)
Compression Molded Tubes	12–950	6–700	≥5 (Customizable)	20–4000
Extruded Tubes	10–445	2–10	2–10	20–4000
Ram Extruded Tubes	0.3–40	0.1–5.0	0.1–5.0	20–4000

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PFA tube

Product Description:

PFA (Perfluoroalkoxy) is a soluble polytetrafluoroethylene copolymer made by combining tetrafluoroethylene with perfluoropropyl vinyl ether. It retains PTFE's properties but is easier to process




Application areas:

- **Semiconductor:** High-purity chemical transport (e.g., etchants)
- **Chemical Industry:** Corrosive fluid pipelines and reactor linings
- **Medical:** Biocompatible catheters and drug delivery systems
- **od Processing:** Hygienic fluid transfer with easy cleaning
- **Electronics:** Insulation for high-temperature cables

Specifications:

PFA Extruded Tube Specifications

Metric (mm)	Inch Equivalents
2×4, 3×5, 4×6	1/8" (1.6×3.2)
6×8, 8×10, 10×12	1/4" (3.96×6.35)
12×14, 16×18	1/2" (9.5×12.7)
Custom sizes: 0.5–200mm ID, 0.12–3mm wall thickness	

PFA Moulded Tube Specifications

OD / mm	Length/ mm	(Note)
30–400	≤200	*Special sizes can be customized*

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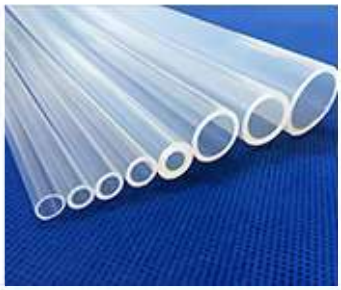
FEPtube

Product Description:

FEP (Fluorinated Ethylene Propylene) tubing is a transparent fluoropolymer tube made from a copolymer of tetrafluoroethylene and hexafluoropropylene, offering exceptional chemical resistance (withstands acids, bases, and solvents) and a wide temperature range (-80°C to +200°C)
Its smooth surface, electrical insulation, and biocompatibility make it ideal for semiconductor manufacturing, medical devices, and corrosive fluid transport.



Application areas:

- Semiconductor Manufacturing
- Medical Devices
- Chemical Industry
- Electronics & Electrical Engineering
- Food & Pharmaceutical
- Aerospace & Automotive
- New Energy & Environmental Tech

Specifications:

FEP Moulded Tube Specifications

OD / mm	Length/ mm	(Note)
30–400	≤200	*Special sizes can be customized*

FEP Extruded Tube Specifications

Metric (mm)	Inch Equivalents
2×4, 3×5, 4×6	1/8" (1.6×3.2)
6×8, 8×10, 10×12	1/4" (3.96×6.35)
12×14, 16×18	1/2" (9.5×12.7)
Custom sizes: 0.5–100mm ID, 0.12–6mm wall thickness	

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Heat Shrink Tubing

FEP Heat Shrink Tubing:

- **Medical:** Catheters, endoscope sheaths, hemodialysis lines (biocompatibility + sterilizability).
- **Electronics:** High-frequency cable insulation, circuit board protection (transparency + arc resistance).

PTFE Heat Shrink Tubing:

- **Aerospace:** Engine wiring harnesses, hydraulic system seals (withstands 260°C).
- **Automotive:** Fuel line sealing, sensor protection (oil resistance + anti-aging).

PFA Heat Shrink Tubing:

- **Semiconductor:** High-purity PFA tubes for etchants, CVD gas delivery.
- **Food/Pharma:** Sterile liquid transfer pipelines (FDA/USP Class VI certified).




Specifications:

Key Parameters

- **Outer Diameter (Before Shrinking):** 1.5–12.0 mm
- **Applications:** Electronic wiring harnesses, small connectors, industrial equipment protection.

Inner Diameter Changes

OD (mm)	Min. ID Before Shrinking (mm)	Max. ID After Shrinking (mm)	Shrinkage Rate
1.5	1.52	1.00	~34%
12.0	11.90	8.70	~27%

Wall Thickness & Packaging

- **Wall Thickness After Shrinking:**
  - For OD ≤5.0 mm: 0.30±0.05 mm
  - For OD ≥6.0 mm: 0.38±0.10 mm
- **Standard Packaging: 1.2 meters per piece.**

* Note: Specifications and dimensions are customized according to customer requirements

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PCTFE

Product Description:

PCTFE (Polychlorotrifluoroethylene) resin is a high-performance fluoropolymer known for its exceptional moisture barrier properties, ultra-low gas permeability, and excellent clarity. It offers outstanding chemical resistance, dimensional stability, and low outgassing characteristics, making it ideal for precision molding applications. With a continuous service temperature range from -200°C to +150°C, PCTFE resin is widely used in critical environments where stability and purity are essential. Its non-flammable, non-toxic nature also complies with demanding safety standards such as FDA and ASTM.




PCTFE Product Standard Specifications:

PCTFE Tube

- Standard length: ≤160 mm
- Outer diameter range: 30 mm – 645 mm
- Inner diameter range: 16 mm – 608 mm

PCTFE Rod

- Small diameters (3.0 – 5.0 mm): 1000 mm only
- Medium diameters (6.0 – 25.0 mm): 200 mm and 1000 mm
- Large diameters (30.0 – 50.0 mm): 100 mm to 500 mm (customizable) and 1000 mm

PCTFE sheet

- Thickness: 3 mm – 50 mm
- Length: 200 mm – 500 mm
- Width: 120 mm – 500 mm
- Color: Typically natural translucent (off-white)
- Surface Finish: Smooth

Other dimensions can be customized upon request.

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PU Tube (Polyurethane) – Technical Specifications & Features

Basic Parameters:

- **Material:** Polyurethane
- **Hardness:** 95A - 98A
- **Fluid Admitted:** Air
- **Operating Temperature Range:** -20℃ to +70℃



Key Features:

- Excellent **pressure resistance**, **weather resistance**, and **corrosion resistance** – suitable for harsh environments
- Highly **flexible** and **kink-resistant**, easy to install
- Designed for **pneumatic piping systems**
- Certain models offer **hydrolysis resistance**, **anti-bacterial**, and **anti-mildew** properties
- Widely used in **industrial automation equipment**, **pneumatic tools**, **fluid transport**, **vacuum systems**, and **protective sleeves for metal and electronics**

Product Model Comparison:

Model	Material	Fluid Admitted	Pressure Range (kgf/cm²)	Hardness (Shore A)	Special Features	Standard
PU	Polyurethane	Air	0 ~ 10	95 ~ 98	Standard type	RoHS
PU-S	Palmitin-based PU	Air	0 ~ 8	85 ~ 90	Hydrolysis resistance, anti-bacterial, anti-mildew	FDA
PU-M	Polyether-based PU	Air, Water	0 ~ 8	85 ~ 95	FDA compliant for food contact	FDA
PU-ZR	Flame-retardant PU	Air	0 ~ 8	85 ~ 95	Flame retardant, UL-94 V-0 certified	UL-94 V-0
PU-UV	Anti-UV & Anti-static	Air	0 ~ 8	85 ~ 90	Anti-UV, anti-static	Level 4

Size can be customized

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Silicone Tubing

Material Overview:

Manufactured using **fumed silicone rubber** and **platinum-cured** process, this tubing complies with **FDA, GB/T 25991, and ISO 10993** medical-grade standards. It ensures excellent safety and performance in demanding applications such as medical devices, food contact, and laboratory systems.



Key Features:

- **High Biocompatibility:** Certified non-cytotoxic; suitable for external medical contact.
- **Excellent Transparency:** Light transmittance ≥90% (for wall thickness ≤3mm), allowing clear visual inspection of fluid flow.
- **Wide Temperature Resistance:** Continuous use from -50℃ to +220℃; short-term up to 250℃.
- **Non-toxic and Odorless:** Free of peroxide residues, ideal for high-purity fluid transfer.
- **Superior Flexibility:** Excellent bending performance without kinking or cracking.

Manufacturing Process:

- **Platinum Curing:** Peroxide-free, ensuring no residual contaminants.
- **Plasma Inner Wall Polishing:** Achieves **surface roughness Ra ≤ 0.2μm**, minimizing fluid retention and improving cleanability.

Product Specifications:

Inner × Outer Diameter (ID × OD)	Hardness (Shore A)	Pressure Resistance (MPa)	Sterilization Method
Φ3 × 6 mm	50 ± 5	0.3	Steam / EO Gas Sterilization

Custom sizes and hardness levels available upon request to meet your specific application needs.

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PE Tubing – Product Specifications & Features

Features:

- **Material:** Polyethylene (PE)
- **Fluid Admitted:** Air, Water
- **Operating Temperature (Environment & Fluid):** -20°C to +60°C
- **Characteristics:** Odorless, tasteless, and non-toxic
  Excellent sanitary properties
  Outstanding corrosion resistance
  Long service life — up to 50 years
  FDA-compliant materials, safe for drinking water systems
  Widely used in products such as water dispensers, purifiers, and similar applications

Applications:

Widely used in **liquid transport systems** in the fields of:

- Water purification
  Chemical industry
  Food processing
  General fluid handling across industrial settings

Specifications:

Item No	Outer Diameter (OD)	Inner Diameter (ID)	Length (L)	Working Pressure (at 20°C)	Color
PE-4*2.5	4 mm	2.5 mm	200 m	0–6 kgf/cm²	Natural / Black
PE-6*4	6 mm	4 mm	200 m	0–6 kgf/cm²	
PE-8*6	8 mm	6 mm	100 m	0–6 kgf/cm²	
PE-10*7.5	10 mm	7.5 mm	100 m	0–5 kgf/cm²	
PE-12*9	12 mm	9 mm	100 m	0–5 kgf/cm²	

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PA Tubing (Nylon Tubing) Technical Specifications

Material Overview:

- **Base Material:** PA6 / PA12 (Polyamide 6/12)
- **Hardness:** Shore D65–68
- **Compliance:** DIN 73378 Standard

Key Features:

- **High Mechanical Strength:**
  - · Tensile strength ≥ 60 MPa (PA12 grade)
  - · Superior resistance to wear and impact loads
- **Fatigue Resistance:**
  - · Bending life > 500,000 cycles (tested under dynamic conditions)
- **Temperature Range:**
  - · Operational: **-40°C to +120°C** (short-term up to **+140°C**)
- **Flame Retardancy:**
  - · UL94 V-0 certified (glass fiber reinforced variants)

Performance & Compatibility:

- **Chemical Resistance:**
  - · Compatible with ethanol, ethylene glycol (≤50% concentration), and mild chemicals.
  - · Not recommended for strong acids, alkalis, or phenolic compounds.
- **Flame Retardancy:**
  - · **UL94 V-0 certified** (glass fiber reinforced variants).
- **Electrical Properties:**
  - · Surface resistance > **200 MΩ** (ideal for insulation in high-voltage environments).

Product Specifications:

Model	Outer Diameter × Wall Thickness (mm)	Burst Pressure (MPa)	Applicable Fluids
PA6-040	Φ4 × 1	5.0	Air, Lubricating Oils

* Note: Custom specifications (colors, lengths, certifications) available upon request.

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Shenzhen Teflon New Material Technology Co., Ltd

Global Compliance Assurance

ISO 9001:2015 + GB/RoHS/FDA Certifications Endorsed by SGS International Testing Breakdown:

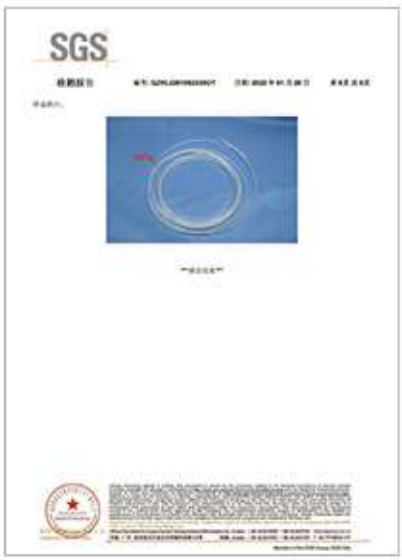
ROHS 认证

ROHS 认证

ROHS 认证

FDA 认证

FDA 认证



FDA 认证

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