



TOQUARTZ
Tech Specifications

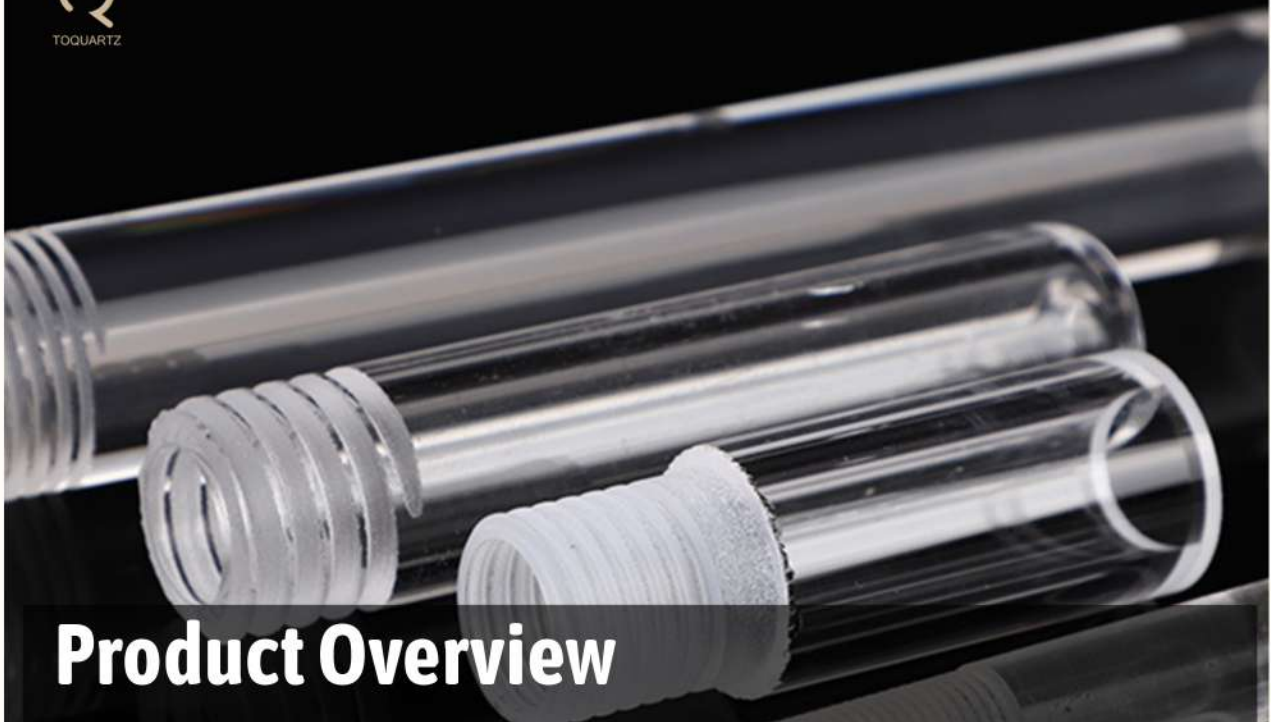
TOQUARTZ® Threaded Quartz Tubes Product Catalog

Integrated Engineering & Agile Production
for Demanded Specifications



TOQUARTZ® THREADED QUARTZ TUBES

TOQUARTZ® is a specialized manufacturer of high-purity quartz products based in China, serving global B2B clients in laboratory instrumentation, biomedical research, and environmental monitoring. With in-house engineering support and flexible production capabilities, we offer both standard and custom TOQUARTZ® threaded quartz tubes with fast delivery and consistent quality.



Product Overview

TOQUARTZ® Threaded Quartz Tubes are precision-engineered from high-purity fused silica ($\geq 99.99\% \text{SiO}_2$), offering exceptional thermal stability, chemical resistance, and optical clarity. These tubes feature precisely machined male or female threaded ends for secure connections in demanding laboratory, optical, and industrial applications.

TOQUARTZ® THREADED QUARTZ TUBES



TOQUARTZ

Key Features

- **Superior Thermal Stability:** Withstands continuous temperatures up to 1250°C with minimal thermal expansion
- **Chemical Resistance:** Highly resistant to acids, alkalis, and corrosive gases
- **Precision Threading:** Machine-tooled threads with $\pm 0.1\text{mm}$ tolerance for secure, leak-proof connections
- **High Purity:** 99.99% SiO_2 content ensures minimal contamination in sensitive applications
- **Electrical Insulation:** High dielectric strength for applications requiring electrical isolation

TOQUARTZ® THREADED QUARTZ TUBES



Applications

- **Laboratory Analysis Systems:**
Gas and fluid handling components for analytical equipment
- **UV/IR Optical Systems:**
Components for UV disinfection and IR heating equipment
- **High-Temperature Processing:**
Industrial furnaces and thermal processing systems
- **Vacuum Systems:** Gas-tight connections for vacuum applications
- **Research Equipment:** Custom solutions for scientific research facilities





TECHNICAL SPECIFICATIONS

Material Properties:

- Material Composition: $\text{SiO}_2 \geq 99.99\%$
- Density: 2.2 g/cm^3
- Working Temperature: 1250°C (continuous)
- Softening Point: 1730°C
- Thermal Expansion Coefficient: $5.5 \times 10^{-7}/^\circ\text{C}$ (20-1000°C)
- Thermal Conductivity: $1.4 \text{ W/m}\cdot\text{K}$ (25°C)
- Mohs Hardness: 5.3-6.5



CUSTOMIZATION OPTIONS

- Custom thread specifications (metric, imperial, NPT, custom pitch and diameter)
- Specialized dimensions (ID/OD from 3mm to 300mm, custom lengths up to 3000mm)
- Various end configurations (single-threaded, double-threaded, mixed male/female)
- Surface treatments (fire-polished, precision ground, frosted)
- Material options (clear fused quartz, UV-transmitting, IR-blocking, opal quartz)



CUSTOMIZATION MANUFACTURING

TOQUARTZ offers comprehensive custom manufacturing services:

- Technical drawing assistance
- Material selection consultation
- Prototype development
- Quality inspection and testing

Our engineering team works directly with customers to develop solutions for specific requirements, from prototyping through volume production.



ABOUT TOQUARTZ®

TOQUARTZ® is a specialized manufacturer of high-quality quartz glass products for industrial, laboratory, and optical applications. Our factory-direct approach eliminates intermediaries, providing cost-effective solutions with responsive technical support. We welcome small batch orders and offer 24-hour shipping for standard items.

Contact Information

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TOQUARTZ® - Precision Quartz Solutions for Industry and Research

For technical specifications, custom requirements, or pricing information, please contact our sales team.