



TOQUARTZ
Tech Specifications

TOQUARTZ® Quartz Digestion Tubes Product Catalog

Integrated Engineering & Agile Production
for Demanded Specifications



TOQUARTZ® QUARTZ DIGESTION 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® Quartz Digestion Tubes with fast delivery and consistent quality.



Product Overview

TOQUARTZ® laboratory quartz digestion tubes manufactured from 99.995% SiO₂ for analytical sample preparation. These vessels feature superior thermal stability, exceptional chemical resistance, and precise dimensional accuracy. Ideal for environmental testing labs, food safety analysis, and research facilities requiring reliable sample preparation equipment.

TOQUARTZ® QUARTZ DIGESTION TUBES



Key Features

- **Exceptional Chemical Resistance:** Withstands aggressive acids including HF, HNO₃, HCl, and H₂SO₄
- **Superior Thermal Stability:** Operates reliably at continuous temperatures up to 1100°C (short-term to 1200°C)
- **High Material Purity:** 99.995% SiO₂ with minimal trace element content
- **Precision Manufacturing:** Tight dimensional tolerances (±0.1mm)
- **Optical Clarity:** Transparent construction allows visual monitoring of reactions
- **Versatile Connectivity:** Available with various connection ports and custom fittings

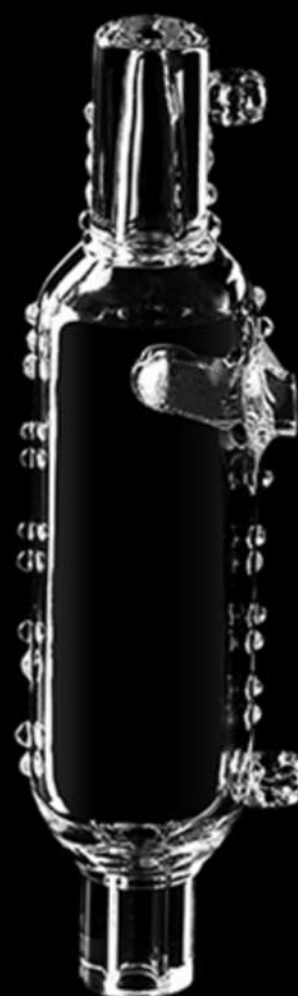
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Applications

- Environmental Analysis: Soil, water, and waste sample preparation for heavy metals testing
- Food Safety Testing: Trace contaminant detection in food products
- Academic Research: Custom protocols for specialized research applications
- Pharmaceutical Analysis: USP/EP compliant testing procedures
- Geological Sample Preparation: Complete dissolution of mineral samples





TECHNICAL SPECIFICATIONS

Material Properties

- **Material Composition:** High-purity fused quartz ($\text{SiO}_2 \geq 99.995\%$)
- **Density:** 2.2 g/cm^3
- **Thermal Expansion Coefficient:** $5.5 \times 10^{-7} / ^\circ\text{C}$ (20-1000°C)
- **Softening Point:** 1730°C
- **Working Temperature:** Continuous: 1100°C | Short-term: 1200°C
- **Thermal Conductivity:** $1.4 \text{ W/m}\cdot\text{K}$ at 20°C
- **Electrical Resistivity:** $7 \times 10^7 \Omega\cdot\text{cm}$ at 20°C
- **Chemical Resistance:** Excellent resistance to all acids (including HF) except phosphoric acid at high temperatures
- **UV Transmission:** >90% at 200-2500nm (1mm thickness)

Standard Dimensions

- **Inner Diameter Range:** 20mm - 50mm (standard), custom sizes available
- **Wall Thickness:** 1.5mm - 3.0mm ($\pm 0.1\text{mm}$ tolerance)
- **Standard Lengths:** 100mm, 150mm, 200mm, 250mm, 300mm (custom lengths available)
- **Connection Types:** Standard joints (14/20, 19/22, 24/40, 29/42), custom flanges, threaded connections
- **Surface Finish:** Fire polished, acid etched, or precision ground



CUSTOMIZATION OPTIONS

TOQUARTZ® offers comprehensive customization services for quartz digestion tubes tailored to your specific analytical requirements:

- Dimensional Specifications: Custom diameters, wall thickness, and lengths
- Connection Interfaces: Specialized joints, flanges, and ports
- Material Enhancements: Surface treatments and custom markings
- Complete Engineering Support: Technical consultation and design assistance



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.