



TOQUARTZ

Product Catalog

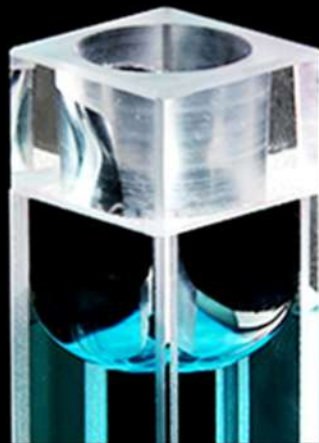
TOQUARTZ® Infrared Quartz Fluorescence Cuvette with Stopper

Integrated Engineering & Agile Production
for Demanded Specifications



TOQUARTZ® INFRARED QUARTZ FLUORESCENCE CUVETTE WITH STOPPER

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® Infrared Quartz Fluorescence Cuvette with Stopper with fast delivery and consistent quality.



Product Overview

TOQUARTZ® sealed quartz cuvette is specifically designed for infrared (IR) and fluorescence spectroscopy applications. Made from high-purity synthetic quartz ($\geq 99.98\%$ SiO_2 , max. up to 99.995%), it offers exceptional optical transmission from 300nm-3500nm, making it ideal for both UV-Vis and IR analysis. The cuvette features a precision-ground body with a PTFE stopper or cap, ensuring airtight sealing for volatile or sensitive samples.

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Key Features

- **High-Purity Quartz Material:** Manufactured from synthetic quartz with purity levels of $\geq 99.98\%$ SiO₂ (up to 99.995%)
- **Wide Spectral Range:** Exceptional optical transmission from 300nm to 3500nm wavelength range
- **Airtight PTFE Stopper:** Features a chemically inert PTFE stopper that creates an airtight seal
- **Chemical Resistance:** Highly resistant to acids, alkalis, and chemical solvents
- **Thermal Stability:** Withstands temperatures up to 1100°C with a low thermal expansion coefficient

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Applications

- **Pharmaceutical Analysis:** Stable analysis of volatile active pharmaceutical ingredients (APIs)
- **Environmental Testing:** Analysis of water contaminants and chemical pollutants
- **Research Laboratories:** Studies of protein folding, enzyme kinetics, and molecular interactions
- **Industrial Quality Control:** Process monitoring and product verification
- **Forensic Science:** Analysis of trace evidence and controlled substances
- **Food and Beverage Testing:** Compositional analysis and quality verification



TECHNICAL SPECIFICATIONS

Physical Properties

- Material: High-Purity Quartz
- Purity: $\geq 99.98\%$ SiO₂ (up to 99.995%)
- Density: 2.2 g/cm³
- Surface Finish: Optical polish
- Tolerance: ± 0.1 mm
- Wall Thickness: 1.25-1.5mm

Optical Properties

- Transmission Range: 300-3500nm
- Transmittance: $> 80\%$ (Paired Testing)
- Refractive Index ($n_{20/D}$): 1.458
- Optical Homogeneity: $\leq 5 \times 10^{-6}$

Chemical Properties

- Acid Resistance: Excellent (except HF)
- Alkali Resistance: Good up to pH 12
- Maximum Temperature: 1100°C
- Thermal Expansion: 5.5×10^{-7} /°C
- Stopper Material: PTFE (Chemically inert)



SIZE CHART



3.5ml Infrared quartz fluorescence cuvette with stopper

Model	Description	Wavelength	PathLength	Volume	Transmittance	Outline Dimension
AT-BSM-2004	3.5ml Infrared quartz fluorescence cuvette with stopper	300nm-3500nm	10mm	3.5ml	>80% (Paired Testing)	12.5x12.5x45mm



CUSTOMIZATION OPTIONS

Customization Services Our engineering team provides comprehensive customization options to meet your specific requirements:

- Custom Dimensions: Path lengths from 0.1mm to 100mm (± 0.1 mm tolerance)
- Specialized Sealing Options: Threaded screw caps, septum-compatible stoppers, flow-through designs
- Material Modifications: Ultra-high purity quartz options, special surface treatments
- Technical Support Services: Design assistance, prototype development, material certification



QUALITY ASSURANCE

Each TOQUARTZ Quartz Cuvette undergoes rigorous quality control testing:

- **Dimensional Verification:** Precision measurement of all critical dimensions
- **Optical Transmission Testing:** Verification of spectral transmission properties
- **Surface Quality Inspection:** Microscopic examination of polished surfaces
- **Paired Performance Testing:** Validation of optical consistency

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.