



TOQUARTZ

Product Catalog

TOQUARTZ® Quartz Screw Cap Cuvette for Infrared Fluorescence Spectroscopy

Integrated Engineering & Agile Production
for Demanded Specifications





TOQUARTZ® QUARTZ SCREW CAP CUVETTE FOR INFRARED FLUORESCENCE SPECTROSCOPY

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 Screw Cap Cuvette for Infrared Fluorescence Spectroscopy with fast delivery and consistent quality.



Product Overview

TOQUARTZ® Quartz Screw Cap Cuvette is manufactured from high-purity synthetic quartz ($\geq 99.98\%$ SiO_2 , up to 99.995%) specifically designed for infrared and fluorescence spectroscopy applications. With excellent transmission in the 300-3500nm wavelength range and precision-engineered PTFE screw caps for airtight sealing, these cuvettes are ideal for analytical laboratories, research institutions, and spectroscopy instrument manufacturers requiring reliable performance with volatile or sensitive samples.



TOQUARTZ® QUARTZ SCREW CAP CUVETTE FOR INFRARED FLUORESCENCE SPECTROSCOPY



Key Features

- High Material Purity: $\geq 99.98\%$ SiO₂ (up to 99.995%)
- Superior Optical Properties: $>80\%$ transmittance across 300-3500nm range
- Airtight PTFE Sealing: Prevents sample evaporation and contamination
- Thermal Stability: Withstands temperatures up to 1100°C
- Chemical Resistance: Exceptional resistance to acids, bases, and solvents
- Precision Dimensions: Manufactured to tight tolerances ($\pm 0.1\text{mm}$)



TOQUARTZ® QUARTZ SCREW CAP CUVETTE FOR INFRARED FLUORESCENCE SPECTROSCOPY



Applications

- Infrared Fluorescence Spectroscopy
- Trace Analysis and High-Sensitivity Detection
- Pharmaceutical and Biological Sample Analysis
- Environmental Monitoring and Testing
- Research & Development in Academic Institutions
- Quality Control in Chemical Manufacturing





TECHNICAL SPECIFICATIONS

Physical Properties

Material:	Synthetic Quartz
SiO ₂ Purity:	≥99.98% (up to 99.995%)
Path Length:	10.00mm ±0.1mm
External Dimensions:	12.5×12.5×55mm
Cell Volume:	3.5ml
Wall Thickness:	1.0mm ±0.1mm
Cap Material:	PTFE

Chemical Properties

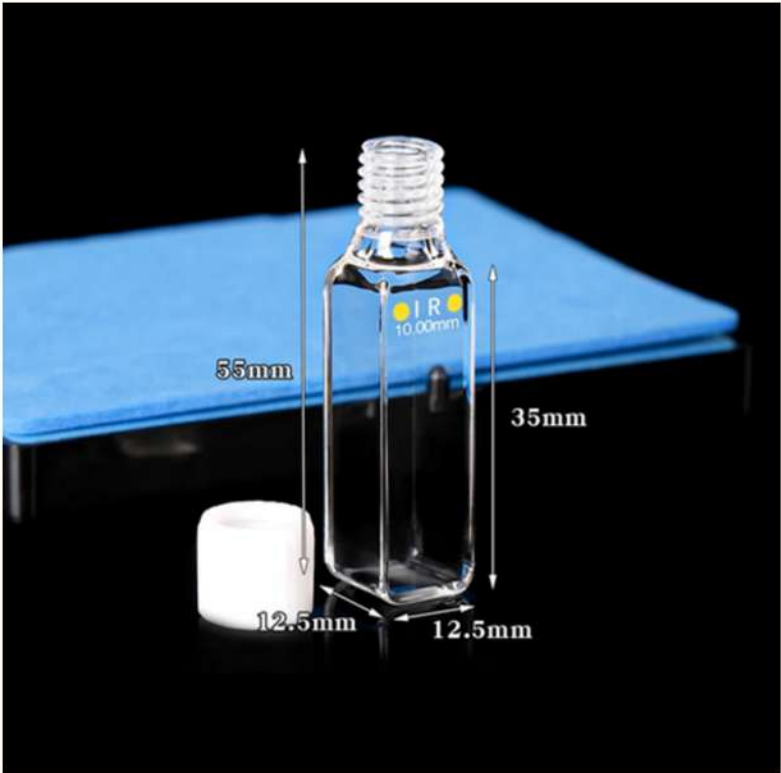
Acid Resistance:	Excellent (except HF)
Alkali Resistance:	Excellent
Solvent Compatibility:	Universal
Water Absorption:	Nil
Gas Permeability:	Negligible
Thermal Expansion:	5.5×10 ⁻⁷ /°C
Max Operating Temp:	1100°C

Optical Properties

Wavelength Range:	300-3500nm
Transmittance:	>80% (Paired Testing)
Refractive Index:	1.46 at 589.3nm
Surface Quality:	Optical polish
Surface Flatness:	λ/4 at 632.8nm
Bubble/Inclusion:	None in optical path
Absorption Peaks:	None in specified range



SIZE CHART



3.5ml Quartz Screw Cap Cuvette for Infrared Fluorescence Spectroscopy

Model	Description	Wavelength	Path Length	Volume	Transmittance	Outline Dimension
AT-BSM-2003	3.5ml Quartz Screw Cap Cuvette for Infrared Fluorescence Spectroscopy	300nm-3500nm	10mm	3.5ml	>80% (Paired Testing)	12.5x12.5x55 mm



CUSTOMIZATION OPTIONS

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

- Path Length: Available from 0.5mm to 100mm
- Cell Volume: Micro-volume options (0.5ml to 3.5ml) and larger capacities
- External Dimensions: Modified to fit specialized instrument holders
- Wall Thickness: Adjustable from 0.5mm to 2.0mm
- Specialized Features: Flow-Through Design, High-Temperature Variants
- Custom Optical Windows: For extended wavelength ranges



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.