



TOQUARTZ

Product Catalog

TOQUARTZ®

Reflective Quartz

UV Cuvette

Integrated Engineering & Agile Production
for Demanded Specifications





TOQUARTZ® REFLECTIVE QUARTZ UV CUVETTE

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® Reflective Quartz UV Cuvette with fast delivery and consistent quality.



Product Overview

TOQUARTZ® Reflective Quartz UV Cuvettes are engineered from high-purity fused quartz ($\geq 99.98\% \text{ SiO}_2$) for superior optical performance in reflectance spectroscopy applications. Designed specifically for analyzing powders, solid materials, and specialized samples where reflection properties are critical, these precision-manufactured cuvettes deliver exceptional results for research laboratories, OEM equipment manufacturers, and analytical facilities.



TOQUARTZ® REFLECTIVE QUARTZ UV CUVETTE



Key Features

- Material Purity: $\geq 99.98\%$ SiO₂ for minimal background interference
- Optical Transparency: Excellent transmission in 200-2500 nm range
- Precision Surfaces: Optical-grade flatness and parallelism
- Thermal Stability: Withstands temperatures up to 1100°C
- Chemical Resistance: Exceptional stability against acids, bases, and chemicals
- Customizable Designs: Available with various reflective properties and dimensions
- Dimensional Precision: Manufactured to tight tolerances ($\pm 0.1\text{mm}$ standard)



TOQUARTZ® REFLECTIVE QUARTZ UV CUVETTE



Applications

- Material Science Research: Analyze surface properties and reflectance characteristics of powders, films, and solid materials
- Fluorescence Detection: Enhanced signal collection for sensitive fluorescence measurements
- OEM Spectroscopy Equipment: Critical component integration in analytical instruments
- Quality Control: Material verification and analysis in production environments
- Chemical Analysis: Surface characterization and compositional analysis



TECHNICAL SPECIFICATIONS

Physical Properties

- **Material:** High-purity fused quartz
- **Density:** 2.20 g/cm³
- **Thermal Expansion:** $5.5 \times 10^{-7}/K$
- **Maximum Operating Temperature:** 1100°C
- **Thermal Conductivity:** 1.3 W/m·K
- **Young's Modulus:** 72 GPa
- **Knoop Hardness:** 500-600 kg/mm²

Chemical Properties

- **SiO₂ Content:** ≥99.995%
- **Chemical Resistance:** Excellent to acids, bases, and salt solutions
- **Water Absorption:** <0.01%
- **OH Content:** <20 ppm
- **Metal Impurities:** <5 ppm
- **Gas Impermeability:** Excellent

Optical Properties

- **Transmission Range:** 200-2500 nm
- **Refractive Index (at 589.3 nm):** 1.4585
- **Reflective Surface Options:** Polished, Frosted, Black-walled, Metal-coated
- **Surface Quality:** 60-40 scratch-dig
- **Flatness:** $\lambda/4$ at 632.8 nm
- **Parallelism:** ≤30 arc seconds



SIZE CHART

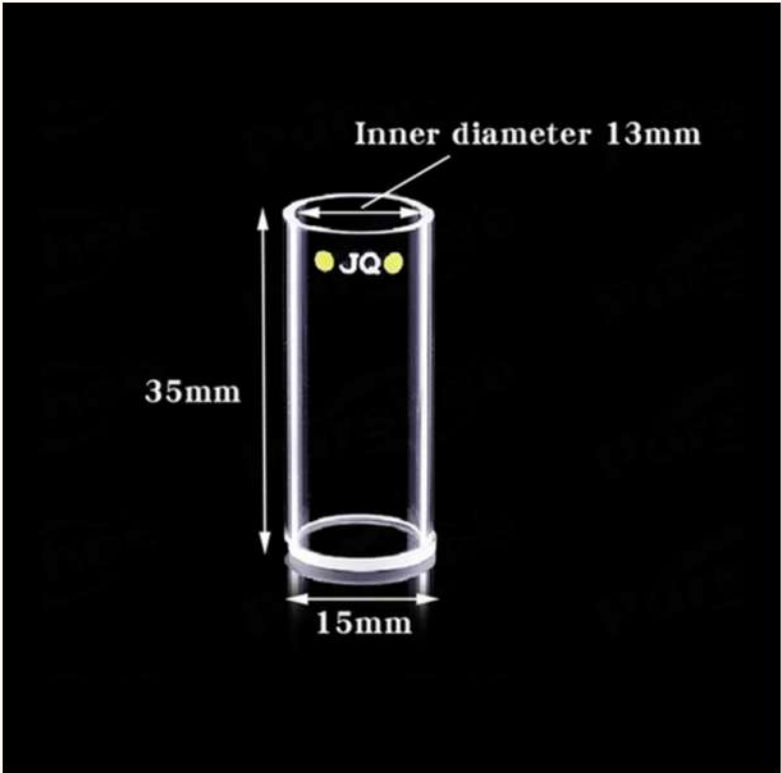


250µl Reflective Quartz UV Cuvette

Model	Description	Wavelength	Volume	Wall Thickness	Thermostability	OD.xHeight
AT-BSM-054	250µl Reflective Quartz UV Cuvette	200nm-2500nm	250µl	1mm	600°C	φ7x15mm



SIZE CHART



3ml Reflective Quartz UV Cuvette

Model	Description	Wavelength	Volume	Wall Thickness	Thermostability	OD.xHeight
AT-BSM-055-1	3ml Reflective Quartz UV Cuvette	200nm-2500nm	3ml	2mm	600°C	φ15x35mm



SIZE CHART



4.5ml Reflective Quartz UV Cuvette

Model	Description	Wavelength	Volume	Wall Thickness	Thermostability	OD.xHeight
AT-BSM-055	4.5ml Reflective Quartz UV Cuvette	200nm-2500nm	4.5ml	1mm	600°C	φ15x35mm



SIZE CHART



14ml Reflective Quartz UV Cuvette

Model	Description	Wavelength	Volume	Wall Thickness	Thermostability	OD.xHeight
AT-BSM-055-4	14ml Reflective Quartz UV Cuvette	200nm-2500nm	14ml	2mm	600°C	φ30*30mm



SIZE CHART



14.5ml Reflective Quartz UV Cuvette

Model	Description	Wavelength	Volume	Wall Thickness	Thermostability	OD.xHeight
AT-BSM-034	14.5ml Reflective Quartz UV Cuvette	200nm-2500nm	14.5ml	1.5mm	600°C	φ16x100mm



SIZE CHART



16ml Reflective Quartz UV Cuvette

Model	Description	Wavelength	Volume	Wall Thickness	Thermostability	OD.xHeight
AT-BSM-051	16ml Reflective Quartz UV Cuvette	200nm-2500nm	16ml	2mm	600°C	φ29x38mm



SIZE CHART



20ml Reflective Quartz UV Cuvette

Model	Description	Wavelength	Volume	Wall Thickness	Thermostability	OD.xHeight
AT-BSM-048	20ml Reflective Quartz UV Cuvette	200nm-2500nm	20ml	2mm	600℃	φ44x20mm



SIZE CHART



40ml Reflective Quartz UV Cuvette

Model	Description	Wavelength	Volume	Wall Thickness	Thermostability	OD.xHeight
AT-BSM-046	40ml Reflective Quartz UV Cuvette	200nm-2500nm	40ml	1mm	600°C	φ35x50mm



SIZE CHART



85ml Reflective Quartz UV Cuvette

Model	Description	Wavelength	Volume	Wall Thickness	Thermostability	OD.xHeight
AT-BSM-041	85ml Reflective Quartz UV Cuvette	200nm-2500nm	85ml	2mm	600°C	φ64x38mm



CUSTOMIZATION OPTIONS

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

- Dimensions: Custom optical window sizes
- Reflective Surfaces: Specialized coatings for enhanced reflectivity
- Chamber Configurations: Custom internal geometries for specialized sample types
- Optical Path Designs: Modified light paths for unique analytical requirements
- Wall Treatments: Black walls, frosted surfaces, or specialized optical treatments
- Integration Features: Mounting points, connection ports, or flow-through designs



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.