



TOQUARTZ
Tech Specifications

TOQUARTZ®

Fluorescence Quartz

UV Cuvette with Lid

Product Catalog

Integrated Engineering & Agile Production
for Demanded Specifications



TOQUARTZ® FLUORESCENCE QUARTZ UV CUVETTE WITH LID

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



Product Overview



TOQUARTZ® Fluorescence Quartz UV Cuvettes with Lid are precision-engineered optical cells manufactured from high-purity fused quartz (max. up to 99.995% SiO₂). Designed specifically for fluorescence spectroscopy and UV-Vis analysis, these cuvettes provide exceptional optical clarity across the 200-2500nm wavelength range with minimal background fluorescence for accurate analytical results.

TOQUARTZ® FLUORESCENCE QUARTZ UV CUVETTE WITH LID



TOQUARTZ

Key Features

- Superior Optical Properties: Wide spectral range (200-2500nm) with >80% transmittance for accurate UV-Vis-NIR applications
- Premium Material Quality: 99.995% SiO₂ purity ensuring minimal auto-fluorescence and superior chemical resistance
- Precision Design: Exact path length (± 0.1 mm tolerance) with secure lid to prevent evaporation and contamination
- Application Versatility: Ideal for fluorescence emission/excitation measurements and DNA/RNA/protein quantification
- Manufacturing Excellence: Factory-direct supply with strict quality control and custom capabilities

TOQUARTZ® FLUORESCENCE QUARTZ UV CUVETTE WITH LID



Applications

- Fluorescence spectroscopy in analytical and research laboratories
- DNA/RNA/protein quantification in life science applications
- Quality control in pharmaceutical and chemical industries
- Environmental monitoring and analysis
- Educational and academic research

A photograph of a TOQUARTZ UV Cuvette with Lid. The cuvette is rectangular and made of clear quartz. It has a black lid with two yellow circular markers. The text 'JQ' and '1.00mm' is printed on the lid. The cuvette is being held by a gloved hand, and the background is dark.

JQ
1.00mm



TECHNICAL SPECIFICATIONS

I .MaterialProperties

Parameter	Value / Range	Notes
Composition	≥99.995% SiO ₂	High-purity fused quartz, low background fluorescence
Density	2.20 g/cm ³	At 20°C
Hardness (Mohs)	5.5–6.5	Suitable for repeated cleaning
Breaking Strength	≥350 MPa	High mechanical stability
Young’s Modulus	72 GPa	Elastic modulus
Poisson’s Ratio	0.17	-



TECHNICAL SPECIFICATIONS

I .MaterialProperties

Parameter	Value / Range	Unit / Notes
Thermal Expansion Coefficient	$5.5 \times 10^{-7} / ^\circ\text{C}$	From 20°C to 300°C
Thermal Conductivity	1.4 W/m·K	At 20°C
Maximum Operating Temperature	1100°C (continuous) / 1200°C (short)	Avoid thermal shock
Specific Heat Capacity	670 J/kg·K	At 20°C
Chemical Resistance	Excellent	Resistant to acids, bases, solvents (except HF, hot H ₃ PO ₄)



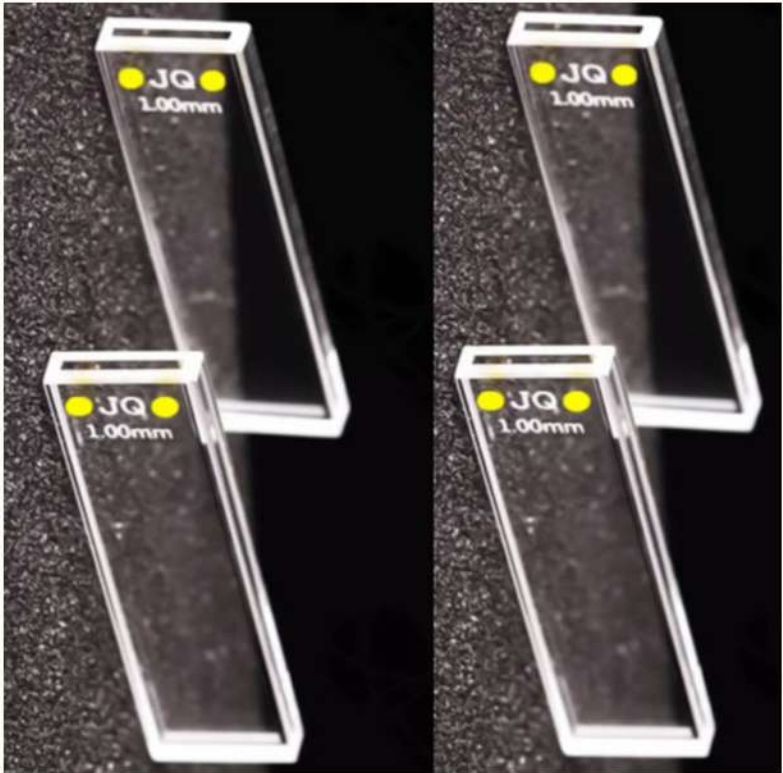
TECHNICAL SPECIFICATIONS

II . Optical Properties

Parameter	Value / Range	Notes
Wavelength Transmission Range	200–2500 nm	UV-Vis-NIR compatible
UV Cutoff	~170–180 nm	Depending on wall thickness
Transmittance	>80% (200–2500 nm)	Measured in paired testing
Refractive Index	1.4585 @ 589 nm	Stable across visible spectrum
Birefringence	None	Isotropic material
Fluorescence Background	Negligible	Suitable for sensitive fluorescence detection
Surface Finish	Optical polish ($\lambda/4$ @ 550 nm)	On all four sides (fluorescence type)



SIZE CHART



1mm Path Length Quartz UV Cuvette Fluorescence Cell with Lid

Model	Description	Wavele ngth	Path Length	Volume	Transmittanc e	Outline Dimension
AT-BSM-011-1	1mm Path Length Quartz UV Cuvette Fluorescence Cell with Lid	200nm- 2500nm	1mm	350μl	>80% (Paired Testing)	/



SIZE CHART



350µl Quartz UV Cuvette Fluorescence Cell with Lid

Model	Description	Wavele ngth	Path Length	Volume	Transmittanc e	Outline Dimension
AT-BSM-070	350µl Quartz UV Cuvette Fluorescence Cell with Lid	200nm-2500nm	1mm	350µl	>80% (Paired Testing)	12.5x3.5x45 mm



CUSTOMIZATION OPTIONS

TOQUARTZ® offers specialized customization services to meet unique application requirements:

- Custom path lengths
- Specialized internal volumes
- Modified external dimensions
- Custom lid configurations
- Black-walled designs for reduced light scattering
- Flow-through cuvette adaptations



CARE AND MAINTENANCE

- Handle by non-optical surfaces (top and sides)
- Clean immediately after use with appropriate solvent
- For routine cleaning, use mild detergent solution followed by deionized water
- Final rinse with spectroscopic-grade acetone or methanol
- Store in original packaging in dust-free environment



QUALITY ASSURANCE

Each TOQUARTZ 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.