



TOQUARTZ

Product Catalog

TOQUARTZ®

Black Wall Fluorescence Flow Cuvette with Glass Tubes

Integrated Engineering & Agile Production
for Demanded Specifications



TOQUARTZ® BLACK WALL FLUORESCENCE FLOW CUVETTE WITH GLASS 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® Black Wall Fluorescence Flow Cuvette with Glass Tubes with fast delivery and consistent quality.



Product Overview

TOQUARTZ® Black Wall Fluorescence Flow Cuvette with Glass Tubes delivers precision fluorescence measurements for analytical laboratories. Manufactured from high-purity quartz with excellent transmission range (190-2500nm) and light-absorbing black walls for enhanced measurement sensitivity.

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Key Features

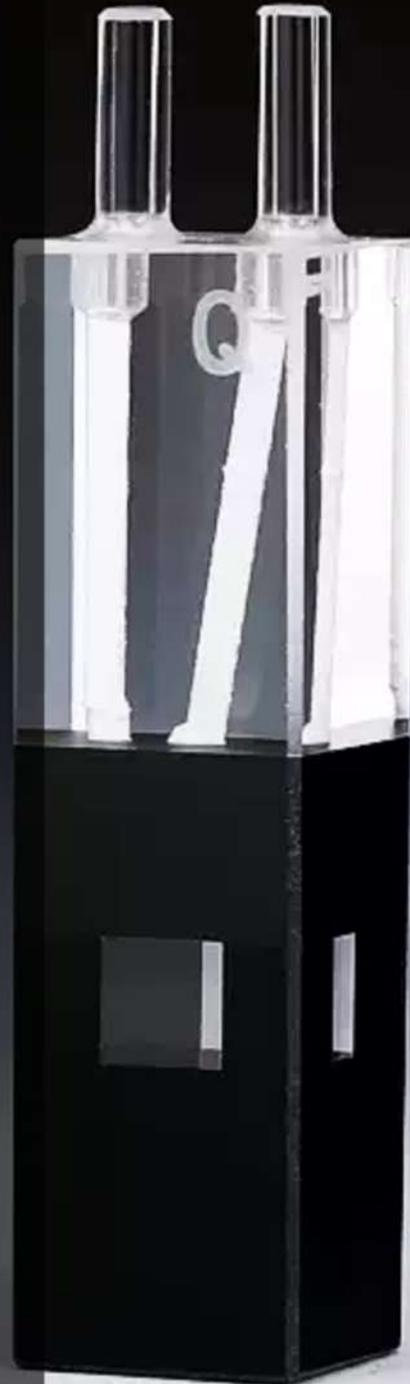
- Superior Light Transmission: Excellent transmission from 190nm to 2500nm
- Black Wall Design: Effectively absorbs scattered light to minimize interference
- High-Purity Quartz Material: Up to 99.995% purity for consistent performance
- Glass Tube Connections: Facilitates easy integration with laboratory setups
- Chemical Resistance: Compatible with most solvents and buffers
- Thermal Stability: Operates reliably across a wide temperature range

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Applications

- Fluorescence Spectroscopy: Enhanced signal-to-noise ratio for trace analysis
- Environmental Monitoring: Detection of trace contaminants in water and soil samples
- Pharmaceutical Analysis: Quality control and research applications
- Biochemical Research: Protein and DNA fluorescence studies
- Continuous Flow Analysis: Online monitoring systems and process control





TECHNICAL SPECIFICATIONS

Physical Properties

- **Standard Internal Diameter:** 2-10 mm (customizable)
- **Wall Thickness:** 1.0-2.0 mm (± 0.1 mm tolerance)
- **Path Length:** 1-50 mm (customizable)
- **Tube Connection Diameter:** 2-6 mm
- **Maximum Operating Temperature:** 1100°C (short-term exposure)
- **Thermal Expansion Coefficient:** $5.5 \times 10^{-7}/^{\circ}\text{C}$ (20-320°C range)

Chemical Properties

- **Material Purity:** Up to 99.995%
- **Chemical Resistance:** Excellent resistance to most acids and organic solvents
- **Hydrolytic Resistance:** Class 1 (ISO 719 standard)
- **Water Absorption:** $< 0.01\%$ at 20°C
- **OH Content:** < 30 ppm (for standard grade)

Optical Properties

- **Transmission Range:** 190-2500 nm
- **UV Cutoff Wavelength:** 185 nm (10 mm path length)
- **Refractive Index:** 1.458 at 546.1 nm (20°C)
- **Stray Light Absorption:** $> 99\%$ (by black walls)
- **Optical Homogeneity:** $< 5 \times 10^{-6}$
- **Optical Finish:** < 0.2 nm RMS (optical windows)

TOQUARTZ SIZE CHART



250µl Black Wall Quartz Fluorescence Flow Cuvette with Glass Tubes

| Model | Description | Path Length | Volume | Outline Dimension |
|-------------|--|-------------|--------|-------------------|
| AT-BSM-8030 | 250µl Black Wall Quartz Fluorescence Flow Cuvette with Glass Tubes | 10mm | 250µl | 12.5x12.5x45 mm |



CUSTOM ENGINEERING SERVICES

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

- Dimensional Customization: Custom path lengths, internal diameters, and overall dimensions
- Connection Adaptations: Specialized fittings, tube connections, and integration options
- Material Specifications: Higher purity grades, specialized coatings, and enhanced properties
- Application-Specific Design: Configurations optimized for your specific analytical requirements



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.