



TOQUARTZ

Product Catalog

TOQUARTZ® Quartz Micro Fluorescence Cuvette with PTFE Lid

Integrated Engineering & Agile Production
for Demanded Specifications





TOQUARTZ® QUARTZ MICRO FLUORESCENCE CUVETTE WITH PTFE 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® Quartz Micro Fluorescence Cuvette with PTFE Lid with fast delivery and consistent quality.



Product Overview

TOQUARTZ® Quartz Micro Fluorescence Cuvettes with PTFE Lids are engineered for precision spectroscopy applications requiring exceptional optical performance and sample integrity. Manufactured from high-purity quartz ($\geq 99.98\% \text{ SiO}_2$), these cuvettes deliver superior transmission across the UV-VIS-NIR spectrum (200-2500nm) with no absorption peaks.



TOQUARTZ® QUARTZ MICRO FLUORESCENCE CUVETTE WITH PTFE LID



Key Features

- Exceptional UV-VIS-NIR transmission (200-2500nm)
- Superior chemical resistance against acids, bases, and solvents
- Polished surfaces with no bubbles or scratches
- Optimal fluorescence signal with minimal background
- PTFE lid prevents evaporation and contamination
- Micro-volume capacity for precious sample conservation

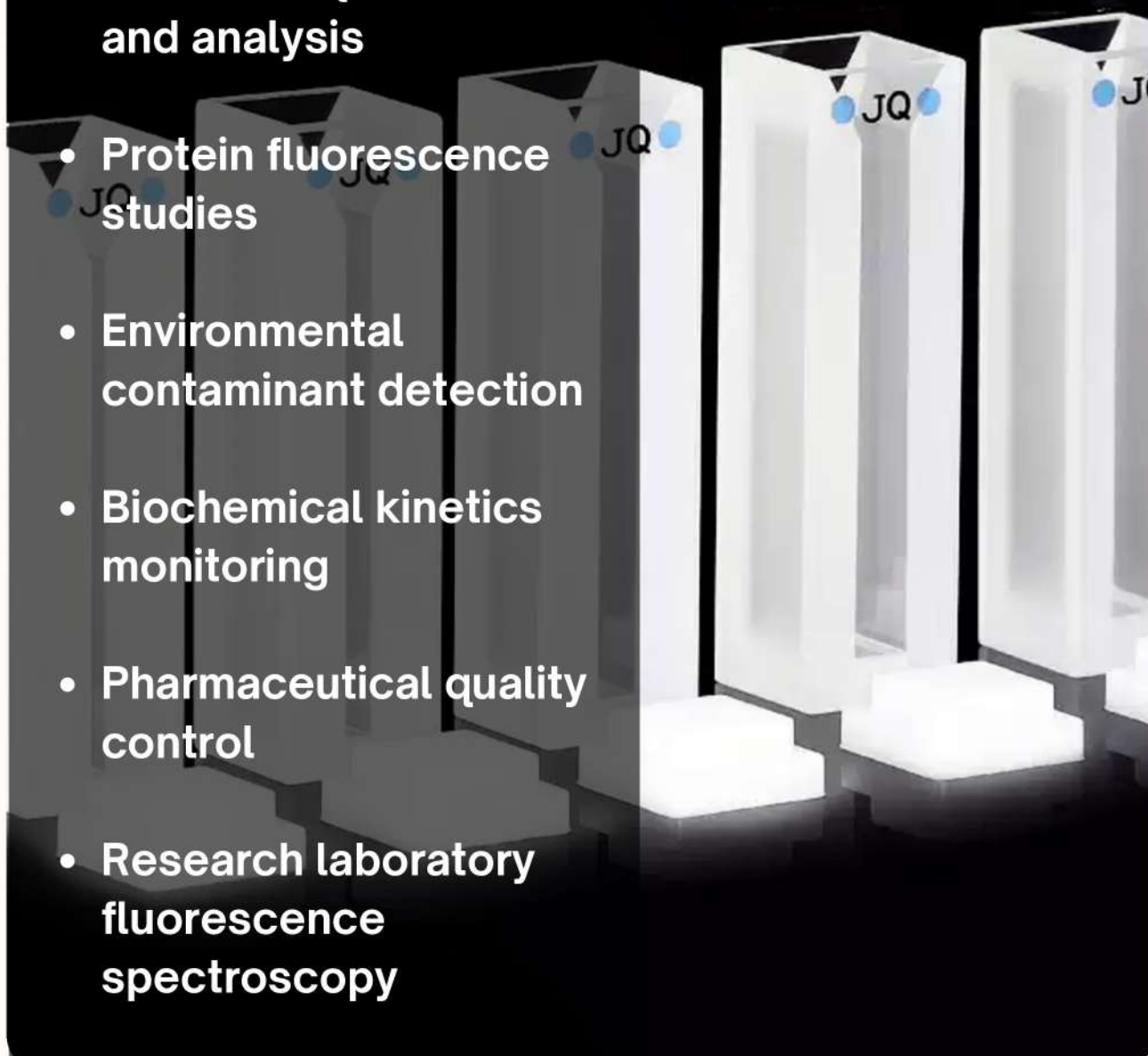


TOQUARTZ® QUARTZ MICRO FLUORESCENCE CUVETTE WITH PTFE LID



Applications

- DNA/RNA quantification and analysis
- Protein fluorescence studies
- Environmental contaminant detection
- Biochemical kinetics monitoring
- Pharmaceutical quality control
- Research laboratory fluorescence spectroscopy





TECHNICAL SPECIFICATIONS

Physical Properties:

- Material: High-purity quartz
- Purity: $\geq 99.995\%$ SiO_2
- Density: 2.2 g/cm^3
- Thermal Expansion: $5.5 \times 10^{-7} / ^\circ\text{C}$
- Hardness: 5.5-6.5 Mohs

Chemical Properties:

- Acid Resistance: Excellent
- Alkali Resistance: Excellent
- Solvent Resistance: Excellent
- Water Absorption: Negligible
- Chemical Inertness: Very High

Optical Properties:

- Transmission Range: 200-2500nm
- Refractive Index: 1.46 (at 589.3nm)
- UV Cutoff: 170nm
- IR Cutoff: 3500nm
- Optical Homogeneity: ± 0.0001



SIZE CHART



350µl Quartz Micro Fluorescence Cuvette with PTFE Lid

| Model | Description | Wavelength | PathLength | Volume | Thermal Stability | Outline Dimension |
|-------------|---|--------------|------------|--------|-------------------|-------------------|
| AT-BSM-4001 | 350µl Quartz Micro Fluorescence Cuvette with PTFE Lid | 200nm-2500nm | 10mm | 350µl | 100°C | 12.5x12.5x45mm |



SIZE CHART



700µl Quartz Micro Fluorescence Cuvette with PTFE Lid

| Model | Description | Wavelength | PathLength | Volume | Thermal Stability | Outline Dimension |
|-------------|---|--------------|------------|--------|-------------------|-------------------|
| AT-BSM-4002 | 700µl Quartz Micro Fluorescence Cuvette with PTFE Lid | 200nm-2500nm | 10mm | 700µl | 100°C | 12.5x12.5x45mm |



SIZE CHART



700µl Quartz Micro Fluorescence Cuvette with PTFE Lid

| Model | Description | Wavelength | PathLength | Volume | Thermal Stability | Outline Dimension |
|-------------|---|--------------|------------|--------|-------------------|-------------------|
| AT-BSM-4009 | 700µl Quartz Micro Fluorescence Cuvette with PTFE Lid | 200nm-2500nm | 10mm | 700µl | 600°C | 12.5x12.5x45mm |



SIZE CHART



560µl Quartz Micro Fluorescence Cuvette with PTFE Lid

| Model | Description | Wavelength | PathLength | Volume | Thermal Stability | Outline Dimension |
|-------------|---|--------------|------------|--------|-------------------|-------------------|
| AT-BSM-4014 | 560µl Quartz Micro Fluorescence Cuvette with PTFE Lid | 200nm-2500nm | 4mm | 560µl | 600°C | 12.5x12.5x45mm |



SIZE CHART



1400µl Quartz Micro Fluorescence Cuvette with PTFE Lid

| Model | Description | Wavelength | PathLength | Volume | Thermal Stability | Outline Dimension |
|-------------|--|--------------|------------|--------|-------------------|-------------------|
| AT-BSM-4026 | 1400µl Quartz Micro Fluorescence Cuvette with PTFE Lid | 200nm-2500nm | 10mm | 1400µl | 100°C | 12.5x12.5x45mm |



SIZE CHART



1050µl Quartz Micro Fluorescence Cuvette with PTFE Lid

| Model | Description | Wavelength | PathLength | Volume | Thermal Stability | Outline Dimension |
|-------------|--|--------------|------------|--------|-------------------|-------------------|
| AT-BSM-4029 | 1050µl Quartz Micro Fluorescence Cuvette with PTFE Lid | 200nm-2500nm | 10mm | 1050µl | 600°C | 12.5x12.5x45mm |



SIZE CHART



1750µl Quartz Micro Fluorescence Cuvette with PTFE Lid

| Model | Description | Wavelength | PathLength | Volume | Thermal Stability | Outline Dimension |
|-------------|--|--------------|------------|--------|-------------------|-------------------|
| AT-BSM-4035 | 1750µl Quartz Micro Fluorescence Cuvette with PTFE Lid | 200nm-2500nm | 10mm | 1750µl | 100°C | 12.5x12.5x45mm |



CUSTOM ENGINEERING SERVICES

Dimensional Customization:

- Custom optical path lengths (1-50mm)
- Specialized internal volumes (100µl-5ml)
- Non-standard external dimensions
- Precision tolerances to $\pm 0.1\text{mm}$

Specialized Surface Treatments:

- Black wall coatings for low background
- Anti-reflective coatings for specific wavelengths
- Frosted surfaces for reduced stray light
- Enhanced signal-to-noise ratio options

Specialized Lid Options:

- Screw-top lids for enhanced sealing
- High-temperature lids (up to 600°C)
- Septum ports for sample addition
- Custom sealing solutions

Custom Project Workflow:

1. Initial Consultation
2. Prototype Design
3. Sample Production
4. Production & Quality Control



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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For technical specifications, custom requirements, or pricing information, please contact our sales team.