



# TOQUARTZ

## Product Catalog

# TOQUARTZ®

## Quartz Micro Cuvettes with Black Walls

Integrated Engineering & Agile Production  
**for Demanded Specifications**



# TOQUARTZ® QUARTZ MICRO CUVETTES WITH BLACK WALLS

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 Cuvettes with Black Walls with fast delivery and consistent quality.



## Product Overview

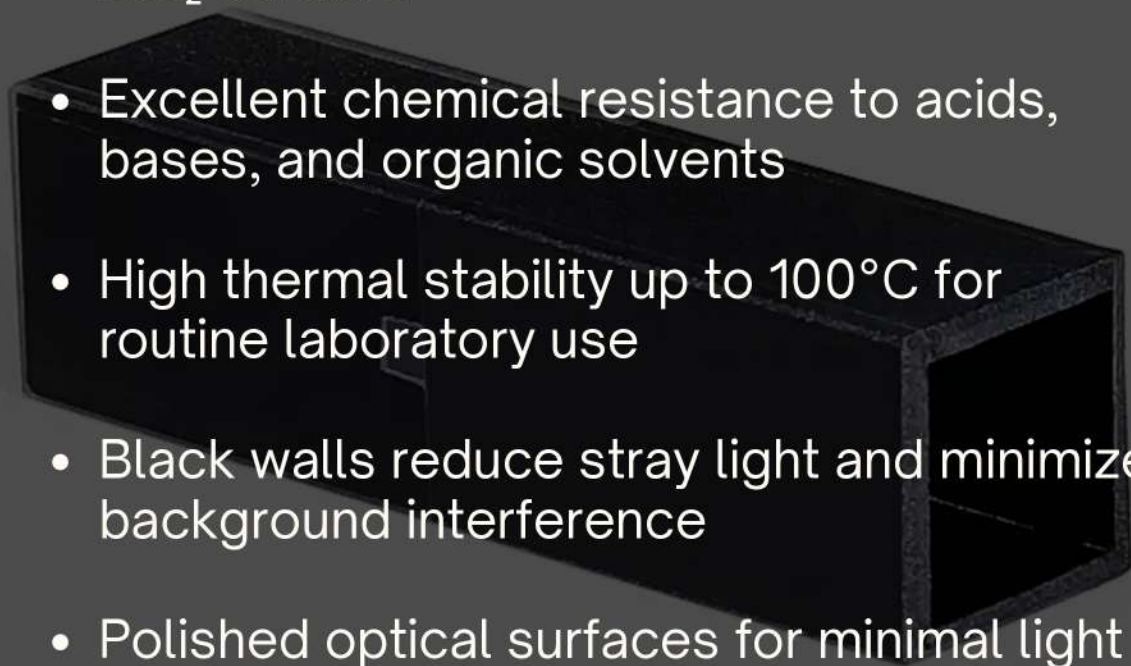
TOQUARTZ® black wall quartz micro cuvettes are specifically designed for applications requiring high sensitivity and precision in spectrophotometric and fluorescence analysis. The black walls minimize stray light interference, improving signal-to-noise ratio for critical analytical measurements with micro-volume samples.

# TOQUARTZ® QUARTZ MICRO CUVETTES WITH BLACK WALLS



## Key Features

- High-purity synthetic quartz with  $\geq 99.98\%$  SiO<sub>2</sub> content
- Excellent chemical resistance to acids, bases, and organic solvents
- High thermal stability up to 100°C for routine laboratory use
- Black walls reduce stray light and minimize background interference
- Polished optical surfaces for minimal light scattering and accurate readings





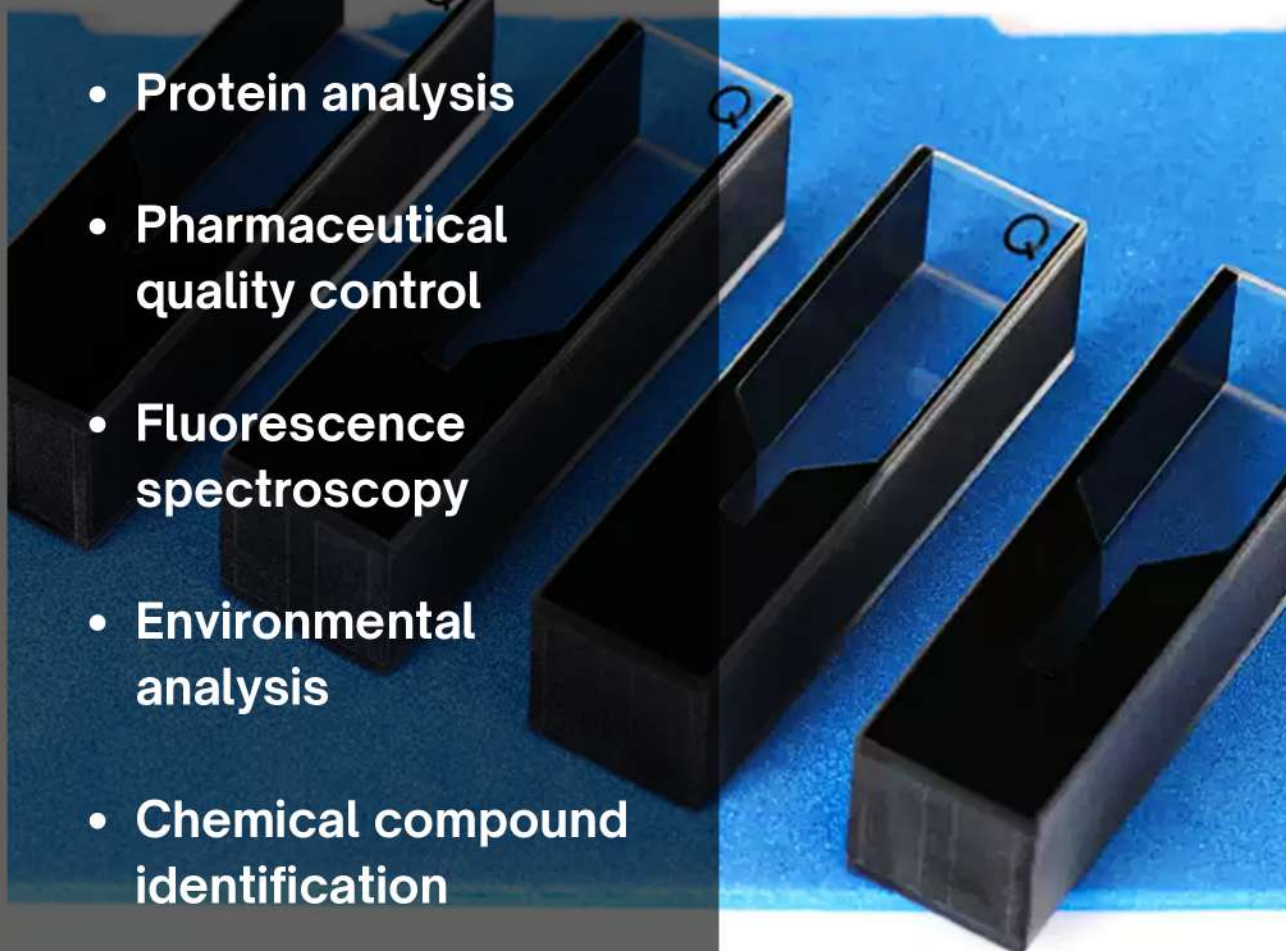
# TOQUARTZ® QUARTZ MICRO CUVETTES WITH BLACK WALLS



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## Applications

- DNA/RNA quantification
- Protein analysis
- Pharmaceutical quality control
- Fluorescence spectroscopy
- Environmental analysis
- Chemical compound identification





# TECHNICAL SPECIFICATIONS

## Physical Properties

- **Material:** High-purity synthetic quartz ( $\geq 99.98\%$   $\text{SiO}_2$ )
- **Tensile Strength:** 50 MPa
- **Density:**  $2.2 \text{ g/cm}^3$
- **Thermal Expansion Coefficient:**  $5.5 \times 10^{-7} / ^\circ\text{C}$
- **Surface Finish:** Polished optical faces
- **Wall Treatment:** Black, opaque walls

## Chemical Properties

- **Acid Resistance:** Excellent (except HF)
- **Alkali Resistance:** Good up to pH 12
- **Solvent Compatibility:** Compatible with most organic solvents
- **Water Absorption:**  $< 0.01\%$
- **Outgassing:** Minimal
- **Biocompatibility:** Inert, non-reactive with biological samples

## Optical Properties

- **Transmission Range:** 200-2500nm
- **UV Cutoff:**  $< 190\text{nm}$
- **Refractive Index:** 1.46 at 589.3nm
- **Dispersion:** Abbe Value = 67.8
- **Optical Homogeneity:**  $\leq 5 \times 10^{-6}$
- **Stray Light Reduction:**  $> 99\%$  with black walls



# SIZE CHART



20µl-200µl Quartz Micro Cuvette with Black Walls

Model	Description	Wavelength	PathLength	Volume	Thermal Stability	Outline Dimension
AT-BSM-4021	20µl-200µl Quartz Micro Cuvette with Black Walls	200nm-2500nm	10mm	20µl-200µl	100°C	12.5x12.5x45mm



# SIZE CHART



50µl Quartz Micro Cuvette with Black Walls

Model	Description	Wavelength	PathLength	Volume	Thermal Stability	Outline Dimension
AT-BSM-4010-1	50µl Quartz Micro Cuvette with Black Walls	200nm-2500nm	10mm	50µl	100°C	12.5x12.5x45mm



# SIZE CHART



50µl/100µl Quartz Micro Cuvette with Black Walls

Model	Description	Wavelength	PathLength	Volume	Thermal Stability	Outline Dimension
AT-BSM-4041	50µl/100µl Quartz Micro Cuvette with Black Walls	200nm-2500nm	10mm	50µl/100µl	100°C	12.5x12.5x45mm





# SIZE CHART



106µl Quartz Micro Cuvette with Black Walls

Model	Description	Wavelength	PathLength	Volume	Thermal Stability	Outline Dimension
AT-BSM-4040	106µl Quartz Micro Cuvette with Black Walls	200nm-2500nm	10mm	106µl	100°C	12.5x12.5x8mm



# CUSTOM ENGINEERING SERVICES

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

- Dimensional Customization: Custom internal volumes, modified external dimensions, custom path lengths
- Surface & Optical Modifications: Special coatings, anti-reflection treatments, custom optical window orientations
- Functional Enhancements: Integration of filling ports, addition of stoppers or caps, 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

Email: [info@toquartz.com](mailto:info@toquartz.com)

Website: [www.toquartz.com](http://www.toquartz.com)

TOQUARTZ® - Precision Quartz Solutions for Industry and Research

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