



TOQUARTZ
Tech Specifications

TOQUARTZ® Triple Neck Round Bottom Quartz Flask Product Catalog

Integrated Engineering & Agile Production
for Demanded Specifications



TOQUARTZ® TRIPLE NECK ROUND BOTTOM QUARTZ FLASK

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® Triple Neck Round Bottom Quartz Flask with fast delivery and consistent quality.



Product Overview

500ml

TOQUARTZ® triple neck round bottom quartz flasks are high-purity laboratory vessels designed for complex chemical reactions and processes. Manufactured from 99.99% SiO₂ fused quartz, these flasks offer exceptional thermal stability, chemical resistance, and optical clarity for demanding laboratory applications.

TOQUARTZ® TRIPLE NECK ROUND BOTTOM QUARTZ FLASK



Key Features

- **High-Purity Material:** 99.99% SiO₂ content for minimal contamination
- **Superior Temperature Resistance:** Withstands continuous use up to 1200°C
- **Excellent Chemical Durability:** Resistant to most acids, bases, and corrosive media
- **Precision Ground Joints:** Standard 24/29 ground joints for universal compatibility
- **Exceptional Thermal Shock Resistance:** Low coefficient of thermal expansion ($5.5 \times 10^{-7} / ^\circ\text{C}$)
- **High Optical Transparency:** Excellent for monitoring reaction progress

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Applications

- High-temperature organic synthesis reactions
- Inert atmosphere chemistry
- Distillation and reflux procedures
- Corrosive media processing
- Photochemical reactions
- Gas-phase reactions and catalysis
- Crystallization processes



TECHNICAL SPECIFICATIONS

Physical Properties:

- Density: 2.2 g/cm³
- Hardness (Mohs): 5.5 - 6.5
- Tensile Strength: 48-51 MPa
- Compressive Strength: 1100-1600 MPa
- Thermal Expansion Coefficient: $5.5 \times 10^{-7}/^{\circ}\text{C}$
- Thermal Conductivity: 1.4 W/m·K
- Maximum Operating Temperature: 1200°C
- Softening Point: ~1730°C

Chemical Properties

- SiO₂ Content: ≥99.99%
- Acid Resistance: Excellent (except HF)
- Alkali Resistance: up to 1200°C
- Water Absorption: Nil
- Chemical Inertness: Inert to most chemicals and reagents
- Trace Element Impurities: <10 ppm total



SIZE CHART

Model	Capacity (ml)	Ground Joint Size	Diameter × Height (mm)	SiO ₂ Content (%)
AT-SY-SP1017	50	24/29	51*85	99.99
AT-SY-SP1018	100	24/29	64*103	99.99
AT-SY-SP1019	150	24/29	75*121	99.99
AT-SY-SP1020	250	24/29	85*130	99.99
AT-SY-SP1021	500	24/29	105*160	99.99
AT-SY-SP1022	1000	24/29	131*187	99.99
AT-SY-SP1023	2000	24/29	166*230	99.99



CUSTOMIZATION OPTIONS

TOQUARTZ offers comprehensive customization services for triple neck round bottom quartz flasks:

- Custom Neck Configurations: Alternative angles, additional necks, specialized positioning
- Alternative Joint Sizes: 14/20, 19/22, 29/32, 34/45, or custom specifications
- Custom Capacities: Non-standard volumes to meet specific requirements
- Specialized Features: Side arms, sampling ports, thermowell tubes, fritted disks



USAGE GUIDELINES

- **Maximum Fill Level:** Fill to no more than 2/3 capacity during reactions
- **Heating:** Use heating mantles rather than direct flame for even heat distribution
- **Support:** Always secure with appropriate clamps and supports
- **Cleaning:** Clean with appropriate solvents followed by thorough rinsing with deionized water
- **Storage:** Store in dedicated cabinets using flask stands to prevent contact damage



ABOUT TOQUARTZ®

TOQUARTZ® is a specialized manufacturer of high-quality quartz glass products for industrial, laboratory, and optical applications. Our factory-direct approach eliminates intermediaries, providing cost-effective solutions with responsive technical support. We welcome small batch orders and offer 24-hour shipping for standard items.

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.