

# **TOQUARTZ**

**Tech Specifications** 



Integrated Engineering & Agile Production for Demanded Specifications

# TOQUARTZ® QUARTZ GLASS EVAPORATING DISH



### **Key Features**

- Superior Thermal Properties: Withstands temperatures up to 1450°C with minimal thermal expansion
- Exceptional Chemical Resistance: Resistant to most acids (except HF), alkalis, and chemical reagents
- High Purity Material: 99.99% SiO₂ purity ensures minimal contamination
- Thermal Shock Resistant: Can transition from high temperature to room temperature without cracking
- Two Bottom Designs: Available in both round bottom (for even heating) and flat bottom (for stability)
- Custom Sizing Available: Bespoke dimensions and specifications upon request

### **Applications**



- Analytical Chemistry: Sample preparation, trace element analysis, digestion procedures
- Materials Science: High-temperature crystallization, phase transformation studies
- Pharmaceutical Research: API crystallization, purity-critical sample preparation
- Chemical Synthesis: Reactions requiring inert containers and high temperature resistance
- Educational Laboratories: Teaching demonstrations and student experiments





Model	Diameter (mm)	Height (mm)	SiO₂ Purity (%)	Bottom Type
AT-SY-ZF001	60	30	99.99	Round
AT-SY-ZF002	80	40	99.99	Round
AT-SY-ZF003	90	45	99.99	Round
AT-SY-ZF004	120	50	99.99	Round
AT-SY-ZF005	150	75	99.99	Round





Model	Diameter (mm)	Height (mm)	SiO₂ Purity (%)	Bottom Type
AT-SY-ZF006	60	30	99.99	Flat
AT-SY-ZF007	80	45	99.99	Flat
AT-SY-ZF008	90	50	99.99	Flat
AT-SY-ZF009	120	60	99.99	Flat
AT-SY-ZF010	150	75	99.99	Flat



#### **CUSTOMIZATION OPTIONS**

# TOQUARTZ engineering team can develop custom quartz glass evaporating dishes to meet your specific requirements:

- Non-standard dimensions
- Special designs (spouts, handles, lids, or multi-compartment configurations)
- Material variations (translucent or opaque quartz options)
- Surface treatments for specialized applications

#### MATERIAL PROPERTIES

#### Physical Properties:

- Density: 2.21 g/cm<sup>3</sup>
- Mohs Hardness: 5.5-6.5 N/mm<sup>2</sup>
- Compressive Strength: 6000 N/mm<sup>2</sup> (16000 psi)
- Tensile Strength: 50 N/mm<sup>2</sup>
- Bending Strength: 67 N/mm<sup>2</sup>

#### Thermal Properties:

- Thermal Expansion Coefficient: 5.5×10<sup>-7</sup>/K (at 100-1100°C)
- Thermal Conductivity: 1.38-2.68 W/m·°C (20-950°C)
- Maximum Operating Temperature: 1450°C



# QUALITY ASSURANCE

All TOQUARTZ® Quartz Glass Evaporating Dishes undergo rigorous quality control to ensure consistent performance in demanding applications.:

- Dimensional verification
- Material composition analysis
- Visual inspection for defects
- Thermal shock resistance testing

#### **Contact Information**

Email: info@toquartz.com Website: www.toquartz.com

TOQUARTZ® - Precision Quartz Solutions for Industry and Research

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