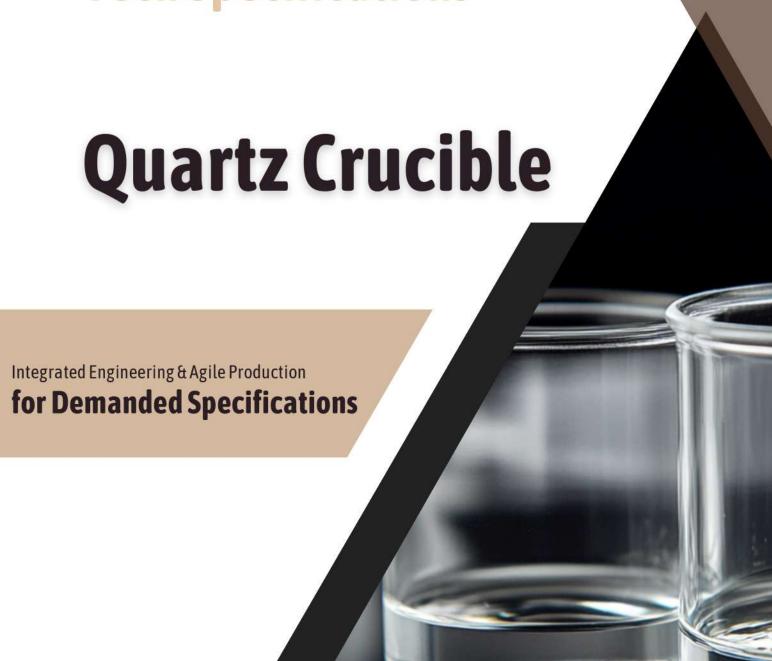




# TOQUARTZ Tech Specifications



# TOQUARTZ® TRANSPARENT QUARTZ CRUCIBLES



#### TRANSPARENT QUARTZ CRUCIBLES

#### **Key Features**

- High Temperature Resistance: Operating temperature exceeds 1100°C with minimal thermal expansion
- Chemical Resistance: Resistant to most acids, bases, and corrosive environments
- Optical Transparency: 92-93% transparency in the visible spectrum (450-780nm)
- Electrical Insulation: Outstanding electrical insulation properties
- Customization Available: Wall thickness, dimensions, and special features can be tailored to your requirements

#### TRANSPARENT QUARTZ CRUCIBLES

## **Applications** Laboratory Instrument Manufacturing: Integrated components for analytical equipment Optical Instrument Production: Components requiring high optical clarity Material Analysis Testing: High-temperature sample containment and processing Research & Development: Controlled environment chemical reactions Academic Research: Sample preparation and experimental procedures



Model	Capacity (ml)	Outer Dia. (mm)	Bottom Dia. (mm)	Height (mm)	Wall Thickne ss (mm)	Purity
AT- QTZ- B001	5	25	18	31	1.5	99%-99. 99%
AT- QTZ- B002	5	25	18	40	1.5	99%-99. 99%
AT- QTZ- B003	10	30	23	42	2	99%-99. 99%
AT- QTZ- B004	10	30	23	53	2	99%-99. 99%
AT- QTZ- B005	20	35	25	45	2	99%-99. 99%



Model	Capacity (ml)	Outer Dia. (mm)	Bottom Dia. (mm)	Height (mm)	Wall Thickne ss (mm)	Purity
AT- QTZ- B006	20	35	25	59	2	99%-99. 99%
AT- QTZ- B007	30	40	30	54	2	99%-99. 99%
AT- QTZ- B008	30	40	30	68	2	99%-99. 99%
AT- QTZ- B009	50	45	33	63	2	99%-99. 99%
AT- QTZ- B010	50	45	33	75	2	99%-99. 99%



Model	Capacity (ml)	Outer Dia. (mm)	Bottom Dia. (mm)	Height (mm)	Wall Thickne ss (mm)	Purity
AT- QTZ- B011	100	54	39	84	2	99%-99. 99%
AT- QTZ- B012	100	54	39	100	2	99%-99. 99%
AT- QTZ- B013	150	60	43	90	2	99%-99. 99%
AT- QTZ- B014	150	60	43	105	2	99%-99. 99%
AT- QTZ- B015	200	69	46	91	2.5	99%-99. 99%



Model	Capacity (ml)	Outer Dia. (mm)	Bottom Dia. (mm)	Height (mm)	Wall Thickne ss (mm)	Purity
AT- QTZ- B016	200	69	46	110	2.5	99%-99. 99%
AT- QTZ- B017	250	75	50	110	2.5	99%-99. 99%
AT- QTZ- B018	250	75	50	130	2.5	99%-99. 99%
AT- QTZ- B019	300	80	51	111	2.5	99%-99. 99%
AT- QTZ- B020	300	80	51	130	2.5	99%-99. 99%



Model	Capacity (ml)	Outer Dia. (mm)	Bottom Dia. (mm)	Height (mm)	Wall Thickne ss (mm)	Purity
AT- QTZ- B021	500	88	67	137	2.5	99%-99. 99%
AT- QTZ- B022	500	88	67	160	2.5	99%-99. 99%



Model	Capacity (ml)	Outer Dia. (mm)	Height (mm)	Wall Thickness (mm)	Purity
AT-QTZ- A001	0.7	20	4	1.5	99%-99.9 9%
AT-QTZ- A002	0.6	12	8	1.5	99%-99.9 9%
AT-QTZ- A003	0.9	12	12	1.5	99%-99.9 9%
AT-QTZ- A004	0.8	12	10	1.5	99%-99.9 9%
AT-QTZ- A005	0.9	20	5	1.5	99%-99.9 9%
AT-QTZ- A006	0.7	12	10	1.5	99%-99.9 9%
AT-QTZ- A007	1.4	18	8	1.5	99%-99.9 9%



Model	Capacity (ml)	Outer Dia. (mm)	Height (mm)	Wall Thickness (mm)	Purity
AT-QTZ- A008	1.3	11	20	1.5	99%-99.9 9%
AT-QTZ- A009	1.6	12	20	1.5	99%-99.9 9%
AT-QTZ- A010	1.7	9	40	1.5	99%-99.9 9%
AT-QTZ- A011	1.5	13	25	1.5	99%-99.9 9%
AT-QTZ- A012	1.3	10	25	1.5	99%-99.9 9%
AT-QTZ- A013	5	20	20	1.5	99%-99.9 9%
AT-QTZ- A014	2	30	5	1.5	99%-99.9 9%



Model	Capacity (ml)	Outer Dia. (mm)	Height (mm)	Wall Thickness (mm)	Purity
AT-QTZ- A015	6	22	20	1.5	99%-99.9 9%
AT-QTZ- A016	3.5	18	18	1.5	99%-99.9 9%
AT-QTZ- A017	4	16	28	1.5	99%-99.9 9%
AT-QTZ- A018	0.5	15	5	1.5	99%-99.9 9%
AT-QTZ- A019	1.2	15	10	1.5	99%-99.9 9%
AT-QTZ- A020	2.6	15	20	1.5	99%-99.9 9%
AT-QTZ- A021	3.7	17	21	1.5	99%-99.9 9%



Model	Capacity (ml)	Outer Dia. (mm)	Height (mm)	Wall Thickness (mm)	Purity
AT-QTZ- A022	5.2	14	44	1.5	99%-99.9 9%
AT-QTZ- A023	6	32	10	2	99%-99.9 9%
AT-QTZ- A024	2	10	40	2	99%-99.9 9%
AT-QTZ- A025	6	15	50	2	99%-99.9 9%
AT-QTZ- A026	8	28	17	2	99%-99.9 9%
AT-QTZ- A027	6	35	8.5	2	99%-99.9 9%
AT-QTZ- A028	7	16	50	2	99%-99.9 9%



Model	Capacity (ml)	Outer Dia. (mm)	Height (mm)	Wall Thickness (mm)	Purity
AT-QTZ- A029	12	54	8	2	99%-99.9 9%
AT-QTZ- A030	6	17	37	2	99%-99.9 9%
AT-QTZ- A031	9	16	60	2	99%-99.9 9%
AT-QTZ- A032	7.5	20	30	2	99%-99.9 9%
AT-QTZ- A033	7	22	25	2	99%-99.9 9%
AT-QTZ- A034	10	25	25	2	99%-99.9 9%
AT-QTZ- A035	9	20	40	2	99%-99.9 9%



Model	Capacity (ml)	Outer Dia. (mm)	Height (mm)	Wall Thickness (mm)	Purity
AT-QTZ- A036	12	19	58	2	99%-99.9 9%
AT-QTZ- A037	16	30	28	2	99%-99.9 9%
AT-QTZ- A038	17	47	13	2	99%-99.9 9%
AT-QTZ- A039	20	23	60	2	99%-99.9 9%
AT-QTZ- A040	17	30	30	2	99%-99.9 9%
AT-QTZ- A041	24.5	25	60	2	99%-99.9 9%
AT-QTZ- A042	23	35	30	2	99%-99.9 9%



Model	Capacity (ml)	Outer Dia. (mm)	Height (mm)	Wall Thickness (mm)	Purity
AT-QTZ- A043	24	28	58	2	99%-99.9 9%
AT-QTZ- A044	28	35	35	2	99%-99.9 9%
AT-QTZ- A045	30	28	58	2	99%-99.9 9%
AT-QTZ- A046	35	30	60	2	99%-99.9 9%
AT-QTZ- A047	39	36	45	2	99%-99.9 9%
AT-QTZ- A048	37	40	35	2	99%-99.9 9%
AT-QTZ- A049	36	26	82	2	99%-99.9 9%



Model	Capacity (ml)	Outer Dia. (mm)	Height (mm)	Wall Thickness (mm)	Purity
AT-QTZ- A050	43	40	40	2	99%-99.9 9%
AT-QTZ- A051	41	40	40	2.5	99%-99.9 9%
AT-QTZ- A052	54	40	50	2	99%-99.9 9%
AT-QTZ- A053	52	40	50	2.5	99%-99.9 9%
AT-QTZ- A054	63	40	60	2.5	99%-99.9 9%
AT-QTZ- A055	130	40	120	2.5	99%-99.9 9%
AT-QTZ- A056	150	60	60	2.5	99%-99.9 9%



Model	Length (mm)	Width (mm)	Height (mm)	Wall Thickness (mm)	Purity
AT-QTZ- C001	50	10	10	2-3	99%-99.9 9%
AT-QTZ- C002	100	10	10	2-3	99%-99.9 9%
AT-QTZ- C003	50	15	10	2-3	99%-99.9 9%
AT-QTZ- C004	100	15	10	2-3	99%-99.9 9%
AT-QTZ- C005	50	20	15	2-3	99%-99.9 9%
AT-QTZ- C006	100	20	15	2-3	99%-99.9 9%
AT-QTZ- C007	50	30	20	2-3	99%-99.9 9%



Model	Length (mm)	Width (mm)	Height (mm)	Wall Thickness (mm)	Purity
AT-QTZ- C008	100	30	20	2-3	99%-99.9 9%
AT-QTZ- C009	50	40	25	2-3	99%-99.9 9%
AT-QTZ- C010	100	40	25	2-3	99%-99.9 9%
AT-QTZ- C011	50	50	30	2-3	99%-99.9 9%
AT-QTZ- C012	100	50	30	2-3	99%-99.9 9%



Model	Length (mm)	Width (mm)	Height (mm)	Wall Thickness (mm)	Purity
AT-QTZ- C013	50	50	50	2-3	99%-99.9 9%
AT-QTZ- C014	100	100	30	2-3	99%-99.9 9%
AT-QTZ- C015	100	100	50	2-3	99%-99.9 9%
AT-QTZ- C016	100	100	100	2-3	99%-99.9 9%
AT-QTZ- C017	200	100	50	2-3	99%-99.9 9%



#### **MATERIAL PROPERTIES**

#### Chemical Composition & OH Content (ppm)

Cr	Ge	Fe	Mg	Ti	Ca	Al	Na	Li	К	ОН
20	0.4	1.5	0.4	10 0	1	16	2.3	0.5	2	<2 5

#### Spectral Transmission at 1.0mm Thickness (%)

<220 nm	230- 280nm	290- 330nm	350nm	450nm	550nm	590nm	780nm
0	<15	0	15	88	92	93	93



#### **MATERIAL PROPERTIES**

#### Physical Properties

Property	Value
Density (20°C)	2.2 × 10³ kg⋅m <sup>-3</sup>
Coefficient of expansion (25-300°C)	0.56 × 10 <sup>-6</sup> °C <sup>-1</sup>
Softening point	1630°C
Annealing point	1180°C
Strain point	1100°C
Young's modulus	7.3 × 10⁵ Pa



Page 21 toquartz.com



#### **CUSTOMIZATION SERVICES**

## TOQUARTZ offers comprehensive customization services for transparent quartz crucibles:

- Dimensional Customization: Custom diameters, wall thickness, and specialized shapes
- Material Modifications: Grade selection (JGS-1, JGS-2, JGS-3) and specific OH content
- Special Features: Added spouts, custom lids, surface treatments, and specialized markings

#### **USAGE GUIDELINES**

- Handle with clean gloves to prevent contamination
- Avoid rapid temperature changes exceeding 200°C/minute
- Compatible with most acids except hydrofluoric acid
- Clean with dilute acids followed by deionized water rinse
- Store in clean, dust-free environment



## QUALITY ASSURANCE

All TOQUARTZ® transparent quartz crucibles undergo rigorous quality control to ensure consistent performance in demanding applications.:

- Dimensional verification
- Optical transparency testing
- Surface quality inspection
- Material composition analysis

#### **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.



# TOQUARTZ Tech Specifications

Quartz Crucible

Integrated Engineering & Agile Production

for Demanded Specifications

# TOQUARTZ® OPAQUE FUSED QUARTZ CRUCIBLES



#### OPAQUE FUSED QUARTZ CRUCIBLES

#### **Key Features**

- High Temperature Resistance: Withstands temperatures above 1100°C with minimal thermal expansion
- Chemical Corrosion Resistance: Resists most acids, alkalis, and salt solutions
- High Purity Material: 99.9-99.98% SiO₂ content ensuring minimal contamination
- Exceptional Mechanical Strength: Fracture modulus exceeding 350 MPa
- Excellent Thermal Conductivity: 120-160 W/m·K for uniform heat distribution
- Customization Flexibility: Available in standard sizes or custom dimensions

#### OPAQUE FUSED QUARTZ CRUCIBLES







Model	Capacity (ml)	Bottom Diameter (mm)	Height (mm)	SiO₂ Content (%)
AT-SY- RG001	5	25	33	99.9-99.98
AT-SY- RG002	10	30	40	99.9-99.98
AT-SY- RG003	15	34	48	99.9-99.98
AT-SY- RG004	20	38	52	99.9-99.98
AT-SY- RG005	25	42	58	99.9-99.98
AT-SY- RG006	30	45	60	99.9-99.98
AT-SY- RG007	50	55	70	99.9-99.98





Model	Capacity (ml)	Bottom Diameter (mm)	Height (mm)	SiO₂ Content (%)
AT-SY- RG008	100	70	95	99.9-99.98
AT-SY- RG009	150	80	105	99.9-99.98
AT-SY- RG010	200	90	115	99.9-99.98
AT-SY-RG011	250	95	130	99.9-99.98
AT-SY- RG012	500	115	165	99.9-99.98
AT-SY- RG013	1000	140	200	99.9-99.98
AT-SY- RG014	2000	170	245	99.9-99.98



Model	Length (mm)	Width (mm)	Height (mm)	SiO₂ Content (%)
AT-SY- RG015	60	40	17	99.9-99.98
AT-SY- RG016	80	25	25	99.9-99.98
AT-SY-RG017	85	85	30	99.9-99.98
AT-SY- RG018	137	73	35	99.9-99.98
AT-SY- RG019	140	80	40	99.9-99.98
AT-SY- RG020	155	94	33	99.9-99.98





Model	Length (mm)	Width (mm)	Height (mm)	SiO₂ Content (%)
AT-SY- RG021	200	200	50	99.9-99.98
AT-SY- RG022	225	56	22	99.9-99.98
AT-SY- RG023	230	94	90	99.9-99.98
AT-SY- RG024	264	175	75	99.9-99.98
AT-SY- RG025	275	125	60	99.9-99.98





Model	Diameter (mm)	Height (mm)	SiO₂ Content (%)
AT-SY-RG026	20	30	99.9-99.98
AT-SY-RG027	25	38	99.9-99.98
AT-SY-RG028	50	15	99.9-99.98
AT-SY-RG029	50	30	99.9-99.98
AT-SY-RG030	128	138	99.9-99.98





#### SQUARE QUARTZ CRUCIBLES

Model	Diameter (mm)	Height (mm)	SiO₂ Content (%)
AT-SY-RG031	148	120	99.9-99.98
AT-SY-RG032	165	125	99.9-99.98
AT-SY-RG033	182	152	99.9-99.98
AT-SY-RG034	205	165	99.9-99.98

#### TOQUARTZ

#### **AVAILABLE SHAPES AND CONFIGURATIONS**

- Arc Shape: Standard laboratory crucibles with rounded bottoms
- Square/Rectangular: Ideal for efficient space utilization and specialized processes
- Cylindrical: Straight-walled designs for specific industrial applications



#### **CUSTOM MANUFACTURING CAPABILITIES**

## TOQUARTZ offers comprehensive customization services for opqaue fused quartz crucibles:

- Custom dimensions with ±0.2mm precision
- Special shapes and configurations
- Technical consultation for optimal material selection
- · Fast prototyping and production

#### **USAGE GUIDELINES**

For maximum crucible lifespan, follow these recommended practices:

- Avoid rapid temperature changes (heat/cool at 100-150°C per hour)
- Pre-heat crucibles at 200°C for 30 minutes before high-temperature use
- Clean with ultrapure water and mild detergent
- Store in clean, dry environments free from contaminants
- Inspect before each use for microscopic damage



## QUALITY ASSURANCE

All TOQUARTZ® opaque fused quartz crucibles 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.



# TOQUARTZ Tech Specifications

**Quartz Crucible** 

Integrated Engineering & Agile Production for Demanded Specifications

## TOQUARTZ® FUSED QUARTZ CZOCHRALSKI CRUCIBLE



### FUSED QUARTZ CZOCHRALSKI CRUCIBLE

### **Key Features**

- Superior Thermal Stability: Withstands temperatures up to 1600°C with excellent thermal shock resistance
- High Purity Composition: 99.99% SiO2 purity with controlled trace elements
- Exceptional Dimensional Precision: Manufactured with tight tolerances (±0.2mm)
- Excellent Chemical Resistance: Highly resistant to corrosion from molten silicon and fluorine gases
- Superior Electrical Insulation: Provides reliable electrical isolation at high temperatures
- Consistent Wall Thickness: Uniform thermal distribution prevents temperature gradients

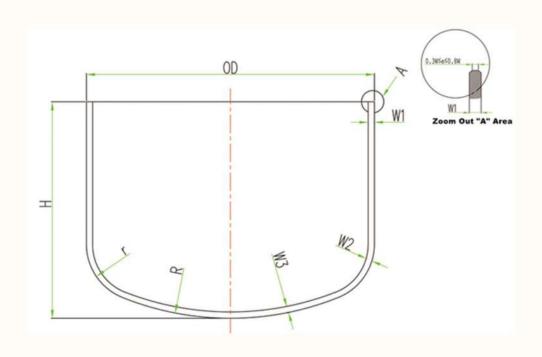
### FUSED QUARTZ CZOCHRALSKI CRUCIBLE







### FUSED QUARTZ CZOCHRALSKI CRUCIBLE



Model	Size (inch)	OD (mm)	Height - H(mm)	Thickness - T(mm)			Standard Radius	Standard Radius	Gap(mm)	sio2
				WI	W2	W3	- R(mm)	- r(mm)		Purity (%)
AT-SY-GG1001	14	355.6(±2.0)	Can be customized	8.5(±2.0)	10.5(±2.0)	8.5(±2.0)	381	89	≤5	99.99
AT-SY-GG1002	16	406.5(±2.5)		9.0(±2.0)	11.0(±2.0)	9.0(±2.0)	406	76		99.99
AT-SY-GG1003	18	457.0(±2.5)		9.5(±2.0)	11.5(±2.0)	9.5(±2.0)	500	120		99.99
AT-SY-GG1004	20	505.0(±3.0)		10.0(±2.0)	11.0(±2.0)	10.0(±2.0)	508	90		99.99
AT-SY-GG1005	22	555.0(±3.0)		11.0(±2.0)	12.0(±2.0)	11.0(±2.0)	558	130		99.99
AT-SY-GG1006	24	607.0(±3.0)		12.0(±2.0)	13.0(±2.0)	12.0(±2.0)	609	120		99.99
AT-SY-GG1007	25	632.0(±3.0)		11.0(±2.0)	11.0(±2.0)	14.0(±2.0)	635	120		99.99
AT-SY-GG1008	26	655.0(±3.0)		12.0(±2.5)	14.5(±2.5)	12.0(±2.5)	669	120		99.99
AT-SY-GG1009	28	710.0(±3.0)		12.0(±2.5)	16.0(±2.5)	12.0(±2.5)	710	120		99.99
AT-SY-GG1010	30	758.0(±3.0)		13.5(±2.0)	13.5(±2.0)	19.0(±3.0)	760	120		99.99
AT-SY-GGI011	32	810.0(±3.0)		14.0(±2.5)	23.0(±2.5)	14.0(±2.5)	810	160		99.99
AT-SY-GG1012	36	912.0(±3.0)		18.0(±2.5)	26.0(±2.5)	18.0(±2.5)	910	180		99.99
AT-SY-GG1013	40	1016.0(±3.0)		20.0(±3.0)	30.0(±3.0)	20.0(±3.0)	1016	186		99.99



### **MATERIAL PROPERTIES**

### **Physical Properties**

Density: 2.21 g/cm<sup>2</sup>

Mohs Hardness: 6.5

Compressive Strength: 1100 MPa

Tensile Strength: 50 MPa

Bending Strength: 67 MPa

### **Thermal Properties**

- Thermal Expansion Coefficient:  $5.11-5.65 \times 10^{-7}$ /°C (100-1100°C)
- Thermal Conductivity: 1.47-2.68 W/(m\*°C) (100-1100°C)
- Specific Heat: 772–1052 J/(Kg\*°C) (100-500°C)

### **Purity Specifications**

- SiO2 Content: ≥99.99%
- Controlled trace elements (Fe, Mg, Mn, K, Li, etc.)



### **CUSTOM ENGINEERING SERVICES**

### TOQUARTZ® provides comprehensive customization services tailored to your specific silicon crystal growing requirements:

- Dimensional Customization: Modify dimensions to match exact specifications
- Specialized Wall Profiles: Custom variations in wall thickness
- Surface Treatment Options: Specialized interior and exterior finishes
- Material Composition Adjustments: Fine-tuning of SiO2 content and trace elements
- Technical Drawing Support: Assistance with specification development



## QUALITY ASSURANCE

All TOQUARTZ® Fused Quartz Czochralski Crucibles 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.



## **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.