



TOQUARTZ

Tech Specifications

Quartz Plate & Disc

Integrated Engineering & Agile Production
for Demanded Specifications



TOQUARTZ®

TRANSPARENT QUARTZ LAB DISH

Premium laboratory-grade vessels

Product Overview



TOQUARTZ® transparent quartz dishes are premium laboratory-grade vessels manufactured from high-purity fused silica (99.99-99.995% SiO₂). Engineered for exceptional performance in demanding research and industrial applications, our quartz dishes combine superior thermal stability, excellent chemical resistance, and outstanding optical properties.

TRANSPARENT QUARTZ LAB DISH

Key Features

- **Exceptional Thermal Stability:** Withstands temperatures up to 1600°C without deformation
 - **Superior Chemical Resistance:** Resistant to most acids, alkalis, and solvents
 - **Excellent Optical Transparency:** $\geq 90\%$ transmission in UV-Visible spectrum (200-2000nm)
 - **High Material Purity:** 99.99-99.995% SiO₂ content for minimal contamination
 - **Precision Manufacturing:** Tight dimensional tolerances ($\pm 0.1\text{mm}$)
 - **Superior Electrical Insulation:** Excellent dielectric properties
 - **Low Thermal Expansion:** Excellent thermal shock resistance
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TRANSPARENT QUARTZ LAB DISH

Applications

- **Materials Research:** High-temperature sample processing, crystal growth, thermal analysis
- **Optical Testing:** UV transmission experiments, photochemical reactions, optical measurements
- **Chemical Processing:** Corrosive chemical handling, high-purity sample preparation
- **Laboratory Analysis:** Sample containment for high-temperature analytical procedures
- **Specialized Industrial Processes:** Custom applications requiring thermal stability and chemical resistance



TECHNICAL SPECIFICATIONS



- Material: High-purity fused silica (SiO_2)
- Purity: 99.99-99.995%
- Temperature Resistance: Up to 1600°C (short-term)
- Continuous Operating Temperature: 1100-1200°C
- Thermal Expansion Coefficient: $5.5 \times 10^{-7}/^\circ\text{C}$
- Optical Transmission: $\geq 90\%$ (UV-Visible range)
- Surface Finish: $R_a < 0.8\mu\text{m}$
- Dimensional Tolerance: $\pm 0.1\text{mm}$ standard ($\pm 0.05\text{mm}$ available for certain dimensions)
- Chemical Resistance: Resistant to most acids, alkalis, and solvents (except HF and hot phosphoric acid)

CUSTOMIZATION OPTIONS

TOQUARTZ offers extensive customization capabilities to meet your specific requirements:

- **Specialized Dimensions & Geometries:** Custom diameters, depths, wall thicknesses, and shapes
- **Surface Modifications:** Fire-polishing, mechanical polishing, or sandblasting
- **Integrated Features:** Pouring spouts, handling tabs, bottom perforations, connection points
- **Material Optimization:** Higher purity grades or specialized doping for specific properties



SIZE CHART

QUARTZ GLASS ROUND LABORATORY DISH

Model	Outer Diameter(mm)	Height(mm)	Wall Thickness(mm)	Si2O's Purity (%)
AT-QTZ-D001	8	4	1-1.8	99.95-99.99
AT-QTZ-D002	10	5.5	1.5-2.5	99.95-99.99
AT-QTZ-D003	15	7	2-3	99.95-99.99
AT-QTZ-D004	20	8	2-4.5	99.95-99.99
AT-QTZ-D005	30	6	2.5	99.95-99.99



SIZE CHART

QUARTZ GLASS ROUND LABORATORY DISH

Model	Outer Diameter(mm)	Height(mm)	Wall Thickness(mm)	SiO ₂ 's Purity (%)
AT-QTZ-D006	50	15	3-5	99.95-99.99
AT-QTZ-D007	85	18	5-7	99.95-99.99
AT-QTZ-D008	100	20	5-7	99.95-99.99
AT-QTZ-D009	120	25	7-10	99.95-99.99
AT-QTZ-D010	180	30	7-10	99.95-99.99
AT-QTZ-D011	260	35	7-10	99.95-99.99



SIZE CHART

QUARTZ GLASS ROUND LABORATORY DISH

Model	L(mm)	W(mm)	H(mm)	Wall Thickness(mm)	SiO ₂ 's Purity (%)
AT-QTZ-F001	30	20	5	2	99.95-99.99
AT-QTZ-F002	40	40	8	3	99.95-99.99
AT-QTZ-F003	45	30	10	3.5	99.95-99.99
AT-QTZ-F004	50	50	12	4	99.95-99.99
AT-QTZ-F005	70	70	15	4.5	99.95-99.99
AT-QTZ-F006	100	100	20	4.5	99.95-99.99



SIZE CHART

QUARTZ GLASS ROUND LABORATORY DISH

Model	L(mm)	W(mm)	H(mm)	Wall Thickness(mm)	SiO ₂ 's Purity (%)
AT-QTZ-F007	150	150	22	5	99.95-99.99
AT-QTZ-F008	200	100	25	5	99.95-99.99
AT-QTZ-F009	200	200	13	5	99.95-99.99
AT-QTZ-F010	300	300	18	6	99.95-99.99
AT-QTZ-F011	350	200	25	6	99.95-99.99
AT-QTZ-F012	400	400	30	7	99.95-99.99



QUALITY ASSURANCE

Every TOQUARTZ transparent quartz dish undergoes rigorous quality control procedures:

- **Material Verification:** Composition and purity testing
- **Dimensional Inspection:** Precision measurement of all critical dimensions
- **Optical Quality Assessment:** Transmission and clarity verification
- **Surface Finish Evaluation:** Surface roughness measurement
- **Visual Inspection:** 100% inspection for defects or imperfections

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.