



# QUARTZ CRUCIBLE



Tall Form Quartz Crucible can be transparent or milky white. These quartz crucibles can withstand up to 1100 degree centigrade. It is most important to note that tall form quartz crucible can withstand very high thermal shock (1000 degree centigrade to room temperature).

It is obtained through different types of raw materials because that includes natural or synthetic quartz sand. These are highly resistant to thermal shock due to the extremely low coefficient of thermal expansion because they have excellent electrical strength that offers stability under temperature variation.

Our range of Tall Form Quartz Crucible is developed in our company by using high purity fused quartz as raw material and fabricating with advanced ceramic technology.



#### Thermal Properties of Tall Form Quartz Crucible

Thermal Conductivity	1.38(W/mºK)	
Coefficient Of tThermal Expansion(0~1000 °C)	0.55(10 -6/ °C)	
Normal Operating Temperature (Continuous Usage)	~1050 °C	
Normal Operating Temperature (Non Continuous Usage)	~1250 °C	
Strain Point	~1075 °C	
Annealing Point	~1180 °C	
Hot Pressing Temperature	~1700 °C – 2100 °C	
Devitrification Temperature	Starting at ~1000 ° C. high temperature accelerates Devitrification, especially with surface contaminants such as alkaline solution, salts and vapours.	



#### Physical Properties of Tall Form Quartz Crucible

	Units of Measure	Value
Density	gm/cc (lb/ft3)	2.2
Porosity	%(%)	0
Tensible Strength	106 Pa	48.3
Young's Modulus	106 Pa	71.7
Hardness	kg/mm2	600
Thermal Conductivity	W/mºK	1.38
Coefficient of Thermal Expansion	10-6/°C	0.55
Specific Heat	J/Кg°К	740
Dieletric Strength	Ac-kv/mm (volts/mil)	30
Dieletric Constant	@1MHz	3.82
Index of refraction @ 587.6nm	_	1.4585







# Thank You

### **For Your Attention**



