

## OHARAQUARTZ

High Purity Fused Quartz **SK-4304, SK-4306**

The OHARA high purity fused silica quartz SK-4304 and SK-4306 products have a particular feature in that the natural crystals are rigorously selected and fused with the flame of hydrogen oxygen gases for a considerable length of time. The amount of toxic impurities of alkaline metals as a result is extremely small and there are very few bubbles.

Shapes : Plates, discs, blocks, tubes and rods.

Applications : Jigs or tools used for the semiconductor industry, large-scale cleaning baths, sputtering targets and windows for withstanding high temperatures.

**Typical Impurity Analysis**

Element	AL	Fe	Ca	Cu	Na	K	Li	OH
SK-4304	9	0.3	0.6	<0.03	0.3	0.3	<0.1	150
SK-4306	8	0.2	0.4	<0.03	0.1	<0.1	<0.1	150

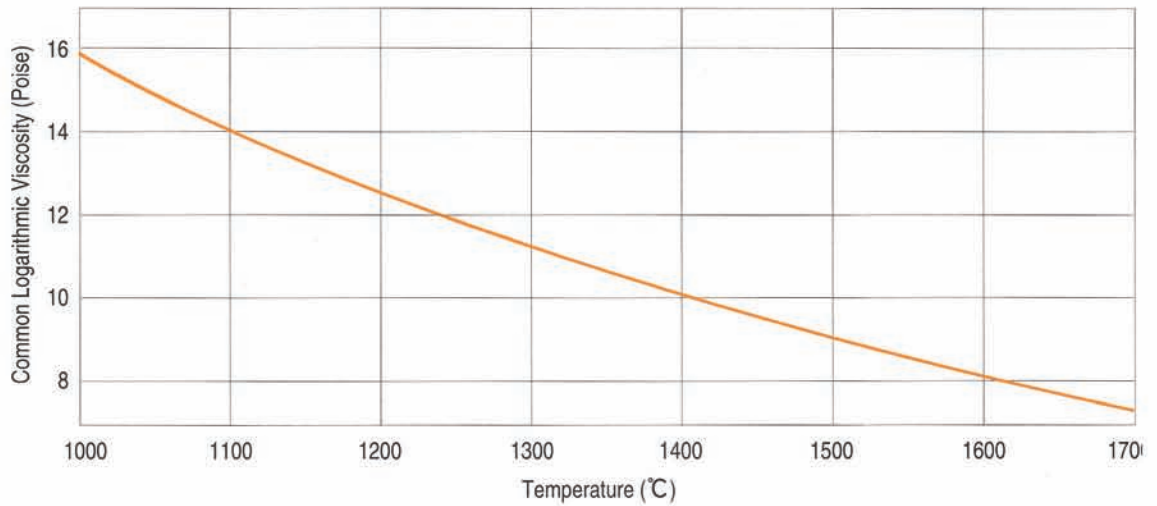
**Chemical Resistance**

Chemicals	Treatment temperatures (°C)	& hours (H)	Weight loss (mg/cm <sup>2</sup> )
H <sub>2</sub> O	95	24	0.001
5% HCl	95	24	0.01
5% H <sub>2</sub> SO <sub>4</sub>	95	24	0.01
5% NaOH	95	6	0.7

## Physical properties

Item	Unit	Value	Item	Unit	Value
Density	g/cm <sup>3</sup>	2.20	Coefficient of thermal expansion	cm/cm°C	5.5 × 10 <sup>-7</sup>
Young's module	kg/mm <sup>2</sup>	7440	Softening point	°C	1720
Poisson's ratio		0.17	Annealing point	°C	1170
Compression strength	kg/mm <sup>2</sup>	115	Strain point	°C	1060
Bending strength	kg/mm <sup>2</sup>	7.0			
Tensile strength	kg/mm <sup>2</sup>	5.6			
Torsional rigidity	kg/mm <sup>2</sup>	3000	Specific heat (26°C)	cal/g·°C	0.176
Vickers hardness	kg/mm <sup>2</sup>	900~1000			

## Viscosity



## Transmission

