

DATA SHEET

Quartz Cerium Doped Glass

The main material is high purity quartz, doped with a little cerium to block ultraviolet and absorb all ultraviolet, maintaining visible spectral range of light to reach the largest transmission efficiency

Chemical Impurities

Impurity Content(ppm)													
A1	Fe	Ca	Mg	Ti	Ni	Mn	Cu	Li	Na	K	Co	B	OH
-	0.50	0.50	0.30	-	0.10	0.05	0.05	1.50	1.50	1.50	0.03	0.20	20

Note: the above data are only for reference.

Mechanical properties

Density (g/cm ³)	2.2
Pressive strength (N/mm ²)	1100
Buckling strength	67
Tensile strength	48
Micro strength	8600-9800
Mahs hardness	5.5-6.5

Chemical properties

HNO ₃	Specific gravity 1.4g/cm ³ , (2h, 20°C)	5*10 ⁻⁸
HCL	Specific gravity 1.19g/cm ³ , (2h, 20°C)	15*10 ⁻⁸
NaOH	1%g/cm ³ (2h , 110°C)	166*10 ⁻⁶
KOH	1%g/cm ³ (2h , 98°C)	68*10 ⁻⁶

Thermal properties

Coefficient of thermal expansion	5.5*10 ⁻⁷ /°C
Thermal conductivity (w/m°C , 20°C)	1.4
Specific heat	670
Soft point(viscosity 10 ⁸ Pa.S)	1680°C
softening point (viscosity 10 ¹³ Pa.S)	1215°C
strain temperature (long time heat retaining)	1200°C
Long time operating temperature.	1100°C
Short time operating temperature	1300°C

Electrical properties

Resistivity (350°C. Ω.cm)	7*10 ⁷
Insulation strength(20°C , KV/cm)	250-400
Dielectric constant ξ(F/m)	3.7

Optical properties

