

KTaO₃

Potassium Tantalate Single Crystals

Typical Properties

| | | |
|-----------------------|---|---|
| Molecular weight | : | 268.04 |
| Crystal Structure | : | Cubic, Perovskite, a = 3.989 Å |
| Melting point | : | 1352.2 °C |
| Density | : | 7.015 g / cc |
| Thermal conductivity | : | 0.17 w/m.k at 300k |
| Refractive index | : | 2.14 |
| Sellenmeyer equation | : | $\eta_o^2 - 1 = 3.591\lambda^2 / (\lambda^2 - (0.193)^2)$ (λ in μm , from 0.4 – 1.06 μm) |
| Crystal growth method | : | Top seed flux growth |

KaTaO₃ Crystal Substrate Specs

| | | |
|-----------------------|---|--------------------------------|
| Purity | : | 99.99% |
| Standard Sizes | : | 10 mm x 10 mm x 0.5 mm |
| Common Orientation | : | (100) or (110), |
| Orientation tolerance | : | + / - 0.5° |
| Surface Finish | : | one or both faces epi-polished |
| Surface Roughness | : | <10 Å |



MTI Corporation

860 South 19th Street, Richmond, CA 94804, USA

Tel: (510)525-3070 Fax: (510)525-4058 E-mail: info@mtixtl.com Website: www.mtixtl.com