

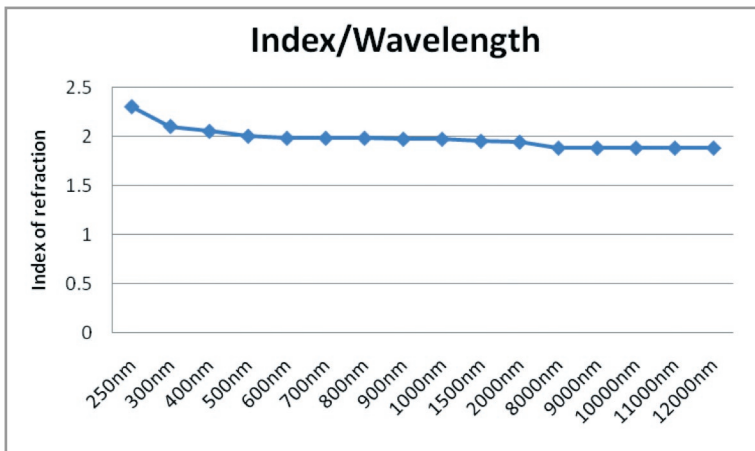
Hafnium Oxide – HfO₂

Molecular Formula: HfO₂
Color of Material: White
Specification: Per customer request

Vacuum Engineering & Materials Co., Inc.
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Parameter Table	
Refractive Index	1.99 @ 550nm
Light Absorption Coefficient	<9*10 ⁻⁴ @ 550nm
Transmission of Wavelength	220 to 12000 nm
Evaporation Temperature	2700° C
Evaporation Source	E,RS
Thermal Conductivity	23.0 W/m ⁻¹ –K ⁻¹
Dielectric Constant	About 20
Coefficient of Expansion	5.9 um – m ⁻¹
Molecular Weight	123.22 g/mole
Density	9.68 g/cm ³
Melting Point	2812° C
Solubility	Does not dissolve in water, dissolves in alkali
Applications	Anti-reflection, multi-layer filters and band pass applications



Notes:

Evaporation source, RH – resistance heating
 EB-electron beam, S – Sputtering

The information on index of refraction are from public sources and will vary with method and conditions of deposition.