Product highlights of SPINEL material

- Unlimited imagination in optical design: Windows, lenses, prisms, freeform optics, wafer
- Transparent from UV (300 nm) to MWIR (5500 nm)
- Refractive Index from 1.72 to 1.64
- Operating temperature up to 1000°C
- High thermal conductivity
- Isotropic
- Great mechanical strength
- Chemically inert
- Light.

Why choosing SOLCERA

- Advanced Ceramics development and manufacturing for over 60 years
- Made in France, member of LA FRENCH FAB
- SME with international scope
- Expert in transparent ceramics for military programs for over 50 years
- Professional advice and assistance provided by our engineers
- Independent and ITAR-free
- Production capacity from prototypes to large volumes
- Integrated processes from the powder up to the final optical component
- Customer-specific solutions
- Proven expertise in ceramic-to-metal assemblies.

Technical Parameters

Transmittance from 300 nm to 5500 nm > 80% without coating

Refractive Index: 1.64 @ 4 µm, 1.71 @ 587 nm, 1.704 @ 656 nm and 1.725 @ 486 nm, Abbe V-number = 33.8
Maximum size: 150x150x20 mm³ and 300x300x20 mm³ available end of 2020
Thermal conductivity: 15 W/m.K
Density: 3.58
Hardness (Vickers): 1400 daN/mm²
Toughness: 3 MPa.m¹/²
Biaxial Flexural strength: 400 MPa (average).