

## PROPERTIES OF CONTINENTAL MINERAL PROCESSING SPECTRALUX OPACIFIER (ZRSiO<sub>4</sub>)

### Typical Chemical Analysis (in weight %)

*ZrO <sub>2</sub>	Zirconium Oxide	65% Min.
SiO <sub>2</sub>	Silicone Dioxide	32.5% Typ.
Al <sub>2</sub> O <sub>3</sub>	Aluminum Oxide	2.0% Max.
TiO <sub>2</sub>	Titanium Dioxide	0.35% Max.
Fe <sub>2</sub> O <sub>3</sub>	Iron Oxide	0.15% Max.
U & Th	Uranium & Thorium	475 Max.
P <sub>2</sub> O <sub>5</sub>	Phosphrus Pentoxide	0.09% Typ.

*\*Includes 1-4% Hafnium Oxide HfO<sub>2</sub>*

### TYPICAL PHYSICAL PROPERTIES

Melting Point	Greater than 4000°
Coefficient of Thermal Expansion	4.2 x 10 <sup>-6</sup> cm/cm/°C
Hardness	7.5 Moh's Scale
Thermal Conductivity	14.5 BTU/sq. ft./hr./°F/in.
Index of Refraction	2.0
Thermal Stability	no change to 3090°F (1700°C)

### AVERAGE PARTICLE SIZE

1500 Spectralux	6.0 – 8.0 Microns
3500 Spectralux	1.90 – 2.10 Microns
4500 Spectralux	1.65 – 1.75 Microns
5500 Spectralux	1.40 – 1.5- Microns
6000 Spectralux	1.20 – 1.30 Microns
7000 Spectralux	0.95 – 1.05 Microns