



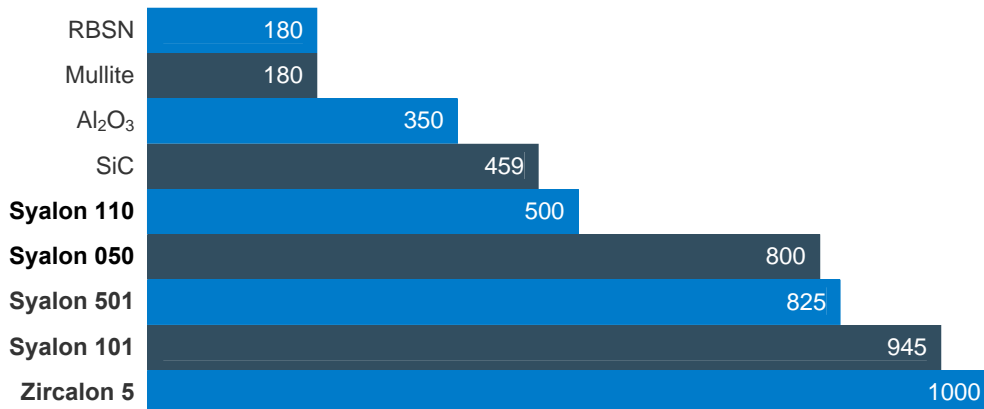
## Comparison of Physical Properties of Ceramics

International Syalons offer a range of Syalon and Zircalon ceramics which will meet your needs in many testing industrial environments.

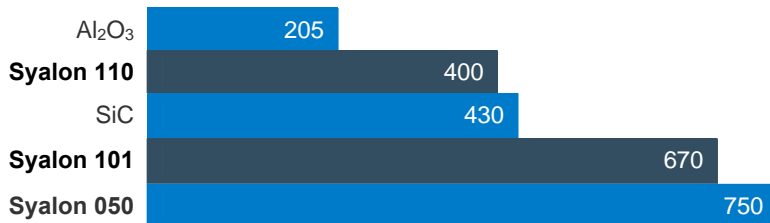
In an effort to show how our materials offer a unique set of physical properties, the graphs below compare some properties of our materials with a number of competitive materials such as alumina ( $\text{Al}_2\text{O}_3$ ), reaction bonded silicon nitride (RBSN), mullite and silicon carbide (SiC). (Comparative data comes from technical literature).

### Modulus of Rupture

Room Temperature Modulus of Rupture (MPa)



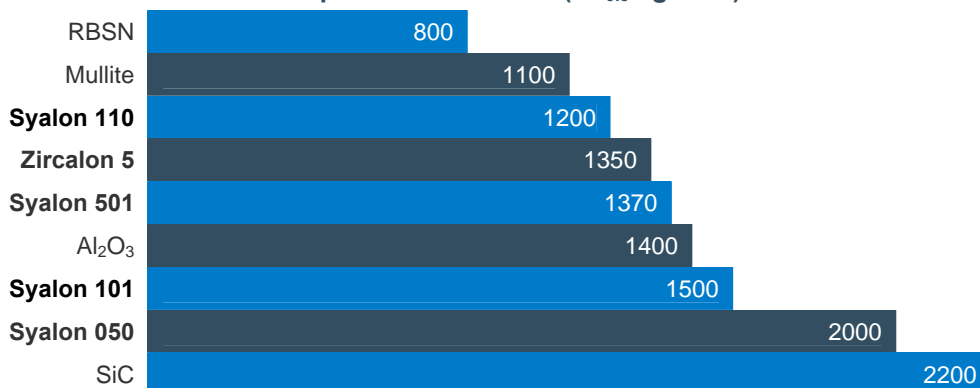
Modulus of Rupture at 1000°C (MPa)



Note RBSN, mullite, Syalon 501 and Zircalon 5 could not be tested at 1000°C

### Hardness

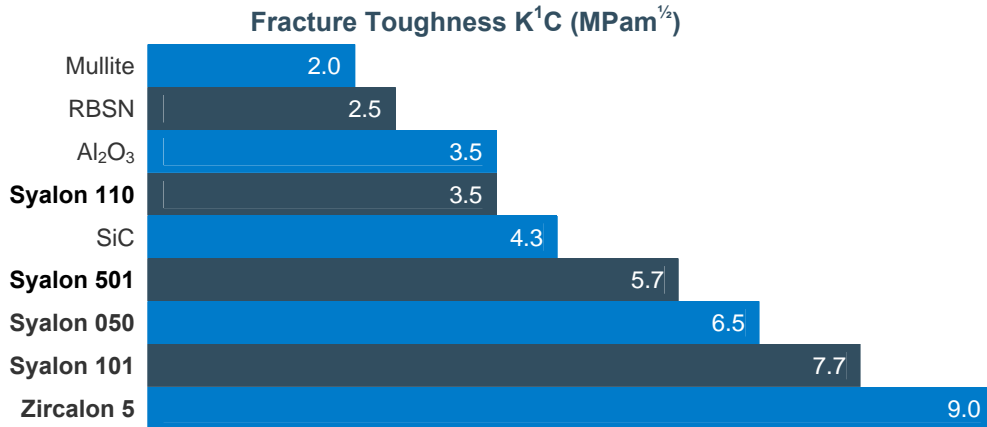
Room Temperature Hardness ( $\text{Hv}_{0.3} \text{ kg/mm}^2$ )



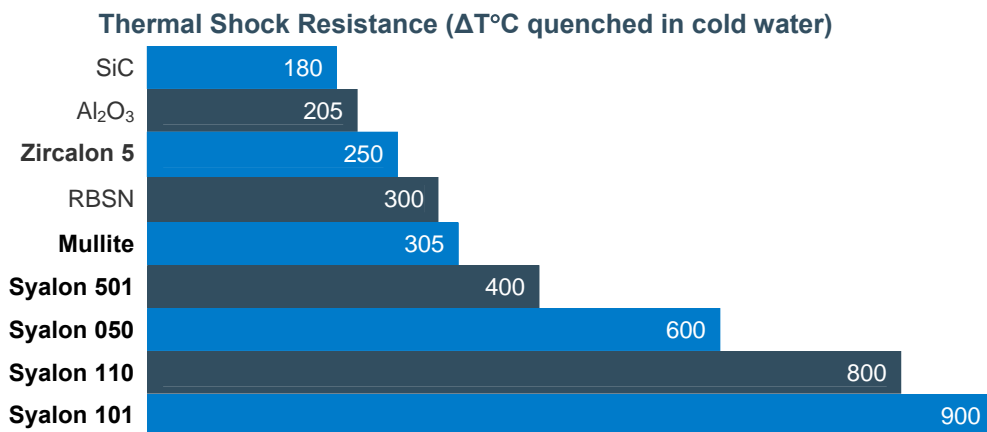


## Comparison of Physical Properties of Ceramics continued...

### Fracture Toughness $K^{1C}$



### Thermal Shock Resistance



### Thermal Conductivity

