• **GraphiSeal** is a low viscosity liquid ceramic precursor resin which heat cures to silicon carbide.
• Used to infiltrate / seal porous graphite, CFC & similar porous substrates used in harsh environments.
• Will improve oxidation, wear and corrosion resistance of porous graphite based products.
• One or more impregnation cycles will fill internal porosity (increase density) and further result in a thin film barrier on the surface.
• For additional enhanced properties GraphiSeal can be combined with particulate fillers (alumina, silicon, etc.) to modify both internal and coated surface properties.

**Attributes of GraphiSeal:**
- Low viscosity (<10 cps), air stable liquid
- Low odor
- Hard cures at 150 to 220°C in air
- Pyrolyzes to glass-ceramic in nitrogen or non oxygen environment at 850°C
- Compatible with most metals, ceramic powders, and carbon/ceramic fibers
- Solvent free (low VOC's)

**Processing of Porous Graphite & CFC:**
- Thin pieces of graphite can be brush /spray coated; for thick pieces soak part immersed in GraphiSeal overnight to ensure full penetration of all open porosity; Vacuum impregnation can speed the process as well as penetrate deeper thickness.
- Remove impregnated part & wipe off excess resin.
- Air cure (up to 220°C) in oven
- High temperature processing (>600°C) in non-oxygen environment (Nitrogen, vacuum, etc) recommended to 850°C but no higher than 1400°C for minimum one hour.
- Repeat cycle. One or more impregnation cycles will fill internal porosity more completely.
- Note that during high temp process, some out gassing will occur.

**Packaging**
- Available in quart, gallon, 5 gallon & 55 gallon containers
- Call for pricing.