Product Data Sheet

WC-16 CERAMIC CEMENT

FEATURES:
- Color: White
- High purity Alumina
- Easy to apply
- High electrical insulation
- 1200°C operation on Alumina CMC
- Non-Flammable
- 100% Inorganic Materials
- Contains no Silica – Useful on Noble metal coating or bonding
- Strong bonds to titanium alloys, CMC, pure carbon composites, and alumina
- Cures at 180°C
- Cured coating is non-toxic
- Non-Carcinogen

WC-16 is an alumina based ceramic coating formulated for bonding noble metal sensors to Titanium and TMC test structures. The cement is made from very high purity (99.5+% alumina powders) with a dilute phosphoric acid based binder. It may be used as a thin paint to provide electrical insulating coatings or to bond wires, foils, up to 0.1 mm thick, to the surface of structures.

This alumina-based coating is, by its nature, a low expansion coating, and intended for use on primarily low expansion materials. It should not be used on iron based alloys because they are reactive with the acid binder. The coating requires heating to cure the coating. Five minutes at 175°C to 190°C is required to permanently solidify the coating. However, higher cure temperatures, up to 800°C may be used. The upper operating temperature limit on Titanium of a properly applied coating is 800°C. Temperature and strain gage measurements on alumina structures have been up to 1200°C.

Available in 1 oz. bottles with a shelf life of six months. Safety Data Sheet SA-205 and Bonding Instructions are available on our website:
http://www.hitecprod.com

For current pricing on strain gages and installation products, please contact us at sales@hitecprod.com or 978-772-6963