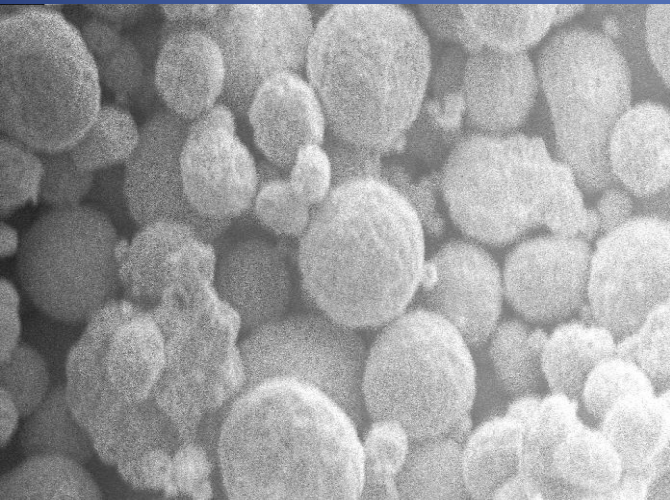


# ZComP™ 844

**Low Thermal Conductivity, Low Radioactivity, Sintering Resistant TBC Material**

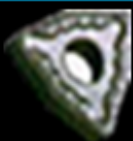
ZComP™ is Powdermet Coating Technologies' family of thermal barrier coating materials. ZComP™ 844 is a low radioactivity, multi-oxide-component, sintering resistant, partially stabilized zirconia, thermal barrier coating (TBC) material. ZComP™ multi-oxide formulation results in a 50% lower thermal conductivity than single-oxide zirconias. By eliminating impurities, such as silica from the material, ZComP™ can be expected to show excellent thermal fatigue properties.



## Typical Material Properties

Density (g/cm <sup>3</sup> )	4.5-6.5
Thermal Conductivity (W/m-K)	<1
Melting Point (°C)	~2700
Radioactivity (Bq/kg)	<100

Product	Powder Description	Particle Size	Properties and Applications
ZComP-844-PM-1	ZrO <sub>2</sub> -8Y <sub>2</sub> O <sub>3</sub> -8(Gd,Yb) <sub>2</sub> O <sub>3</sub> Spheroidal, Spray Dried	-50 +10	•Partially stabilized zirconia •Spheroidal powder for flowability •Thermal Barrier Coating for insulation and thermal shock resistance •High homogeneity and purity
ZComP-844-PM-2		-75 +45	
ZComP-844-PM-3		-95 +25	
ZComP-844-PM-4		-105 +45	
ZComP-844-PM-5		-125 +16	



**POWDERMET INC.**

**The Cutting Edge in Metal Powder Technology**