

# Technical Bulletin

## Yttria Ceramic Coating    Material Property Data

Property	Unit	Typical Value
<b>Porosity</b>	%	<b>&lt; 5</b>
<b>Purity</b>	%	<b>&gt; 99.9 Y<sub>2</sub>O<sub>3</sub></b>
<b>Typical Thickness</b>	µm	<b>100</b>
<b>Adhesion Strength (to aluminum)</b>	MPa	<b>45 - 55</b>
<b>Adhesion Strength (to alumina)</b>	MPa	<b>&gt; 15</b>
<b>Particulates (&gt; 0.3µM)</b>	Cts/c m <sup>2</sup>	<b>&lt; 10<sup>5</sup></b>
<b>Dielectric Strength</b>	kV	<b>3.0</b>
<b>Leachable Impurities</b>	/cm <sup>2</sup>	<b>&lt; 5000 x 10<sup>10</sup></b>
<b>Plasma Etch Resistance</b>		<b>Best</b>

**Note:** Properties can be optimized for specific applications.

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