

# TECHNICAL DATASHEET Version S21

# AI-1010

# **Description and Applications**

**AI-1010** is a premium thermal spray Aluminium Oxide ceramic powder developed primarily for plasma spraying. It may also be used for flame spraying through the Miller FP71.

**AI-1010** produces a dense deposit, which is high in hardness, and wear resistance and can be ground to a fine finish. Also has good resistance to abrasion, sliding wear, friction and oxidation. The deposit has good corrosion resistance in many acidic and alkaline environments. Resists cavitation and fine particle erosion.

Also often used because of its excellent dielectric properties as an electrical insulator.

**Applications include**: Sliding or rotating wear surfaces such as pump shafts and sleeves, mechanical seal faces, pump plungers, sealing rings, thread guides, insulators etc.

#### **Typical Analysis**

We are a series of the series	
Silicon Dioxide	<0.1%
Iron Oxide	<0.1%
Titanium Dioxide	<0.1%
Calcium Oxide	<0.1%
Magnesium Oxide	<0.1%
Sodium Oxide	<0.3%
Aluminium Oxide	99.7 Min
Macro-hardness	65 HRc (Approximate)

### **Particle Size Distribution**

Tarticle Size Bistribation	
+45mu (325 Mesh)	5.00% Max
-45mu (325 Mesh)	95.00% Min
-22 Microns	5.00% Max

## Disclaimer

All figures in this datasheet should be considered indicative only. No guarantee is made as to their accuracy. All figures subject to change without notice. Batch analysis is available for all products sold. Should you require any further information, please contact us at <a href="mailto:sales@alloysint.com.au">sales@alloysint.com.au</a>



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