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# **Aluminum Titanate Coating**

Zypcoat® ALT is an economical water-based Aluminum Titanate (ALT) coating that is non-wetting and non-reactive with aluminum and aluminum-based alloys. The high erosion resistance and high use temperature (> 1400 C) make this a versatile and tough coating for a multitude of applications. This includes protecting refractories during melting, processing and transport of alloys that are highly reactive and/or possess melting temperatures >700-800 C. The coating can be diluted with water as desired and works well on ceramic and metal substrates.

# **Key Attributes**

- Non-reactive and non-wetting with molten aluminum and its alloys
- Resistant to erosion and oxidation
- High use temperature: > 1400 C
- Stable in contact with highly reactive alloys
- · Can be diluted with water as desired

#### **Ideal Use**

- All metal transport components
- Applications that require temperatures greater than typical aluminum processing
- Applications that require a stable, non-reactive barrier coating
- Specialty aluminum alloys requiring very-high purity and zero Boron levels
- Sacrificial coating for Aluminum Titanate components, protecting them and extending their lifetime
- Piston alloy (or "sticky" alloy) processing where messy oil-based coatings are now used.

#### **Use Notes**

- 1. Re-suspend if needed.
- 2. Use full strength, or dilute as desired with water.
- 3. Clean surfaces of any oils, dirt, scale, etc.
- 4. Apply 1-3 layers by brush, dip, or spray like ordinary house paint, drying after each layer.
- 5. Allow to thoroughly dry before use.

## **Safety Information**

- · Consult SDS before use.
- Avoid breathing of spray/vapors.
- For Industrial Use only.



### **Specifications**

Active Ingredient Aluminum	Titanate, Al <sub>2</sub> TIO <sub>5</sub>
Max Use Temperature	1400 C
Use Atmosphere	All
Fired Composition	100% Al <sub>2</sub> TIO <sub>5</sub>
Liquid Carrier	Ŵater
Binder Phase	$Al_{2}TIO_{5}$
Active Ingredient Level	Fully Loaded
Brookfield Viscosity (cps)	980 @3/60
Specific Gravity	1.2
Color	Gray*
Shelf Life (months	>12
Coverage (ft²/gal)	100 to 400
Coating pH	4
H F R Ratings	1-0-0
Substrate Use	All

#### Sizes and colors

Zypcoat ALT is a gray colored paint.

\* Very small amount of Graphite added for visibility

Standard Size: wide-mouth 1 gallon pail. Also available in 5 gallon pail upon request.

#### CAUTION: DO NOT CONTACT WET COATINGS WITH MOLTEN METAL.

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