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Type A1

100% Aluminum Oxide (Al₂O₃), Water-Based Coating

Type A1 is a water-based paint that yields a moderately-hard coating that is 100% Aluminum Oxide when heated >600 C (>1112 F). The coating is typically about 50% dense and has much less hardness than dense Aluminum Oxide ... but does provide many of the useful properties of Al₂O₃ in an easy-to-use paintable form, for all atmospheres to 1800 C (3272 F).

Key Attributes

- Resistant to Molten Metals
- Low Electrical Conductivity
- Relatively High Thermal Conductivity
- Inert to Many Refractory Materials
- Applied Like House Paint
- Safe, Water-Based, No VOC's

Ideal Use

- Crucible/Mold Coatings
- Reaction-Barrier
- Separator Layer
- High Electrical Resistivity Layer

Use Notes

1. Resuspend if needed. Can dilute with water.
2. Clean surfaces to be painted of any oils dirt, scale, etc.
3. Apply one thin layer by brush or spray like ordinary house paint. Apply additional layers if needed, after drying prior layer.
4. Allow to thoroughly dry before use.

Safety Information

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



Specifications

Active Ingredient	Al ₂ O ₃
Max Use Temperature	Air/Inert/Vac (no C) 3272 F / 1800 C Vac (with C present) 2732 F / 1500 C
Use Atmosphere	All
Fired Composition	100% Al ₂ O ₃
Liquid Carrier	Water
Binder Phase	Al ₂ O ₃
Brookfield Viscosity (cps)	3500-6800 @4/60
Specific Gravity	1.7
Color	White
Shelf Life (months)	>12
Coverage (ft ² /gal)	100 to 400
Coating pH	2-3
H F R Ratings	1-0-0
Substrate Use	All

Sizes and colors

Type A1 is a white colored paint.

Standard Size: 1-gallon pail

CAUTION: DO NOT CONTACT WET COATINGS WITH MOLTEN METAL.

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