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Yttrium Oxide (Y₂O₃) Coating for Interaction Barrier

Yttria Stop-Off is a water-based coating of Yttrium Oxide (Y_2O_3) that provides a relatively tough/adherent coating which is usable in all atmospheres to over 1000 C (1832 F) on all substrates. Provides a shield/barrier from reactions/interactions.

Key Attributes

- Water-based paint providing the great properties of Y₂O₃ in all atmospheres for all substrates.
- Applies like housepaint (brush, dip, air-spray)
- Easily applied by air spraying onto hot or cold surfaces
- · Great with highly reactive materials
- Safe, Water-Based, Non-flammable
- Dilutable with water or Type Y for higher purity

Ideal Use

- Protective coating for crucibles and molds
- High temperature lubricant
- Core wash for investment casting
- Interaction barrier and release layer

Use Notes

- 1. Resuspend if needed. Dilute with water or Type Y paint.
- 2. Clean surfaces to be painted of any oils dirt, scale, etc.
- 3. Apply 1-3 layers by brush, dip or air-spray like ordinary house paint, drying after each layer
- 4. Allow to dry thoroughly before use.

Safety Information

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



Specifications

Active Ingredient	99.9% Y ₂ O ₃
Max Use Temperature	
	O 1022 E / 1000 C

Over 1832 F / 1000 C	Over	1832	F /	1000	С
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Use Atmosphere	All
Fired Composition	>90% Y ₂ O ₃
Liquid Carrier	Water
Binder Phase	Potassium Silicate
Brookfield Viscosity (cps) Approx. 300 @3/60
Specific Gravity	1.65
Color	White
Shelf Life (months	>12
Coverage (ft²/gal)	100 to 400
Coating pH	9-10
H F R Ratings	1-0-0
Substrate Use	All

Sizes and colors

Yttria Stop-Off is a white colored paint.

Standard Sizes: 1-gallon, 1-quart, or 1-pint wide-mouth Nalgene containers.

CAUTION: DO NOT CONTACT WET COATINGS WITH MOLTEN METAL.

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