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Zypcoat® YPO

Yttrium Phosphate Coating

Zypcoat YPO is a water-based Yttrium Phosphate coating that has very high use temperature and is non-reactive with many molten materials – metals, alloys, glasses. Zypcoat YPO coating has good adherence to metal or ceramic substrates, and is usable to 1500 C with most conditions/atmospheres.

Key Attributes

- Non-reactive with most materials: metals, alloys and glasses - even in molten state
- Excellent adherence to substrates at high temperatures
- Usable to 1500 C
- Water-based, easy to use and cleanup

Ideal Use

- Molten reactive metal or glass processing/transport
- Very high temperature processing
- Barrier coating to stop diffusion/reactions/interactions

Use Notes

1. Re-suspend if needed.
2. Use full strength, or dilute as desired with water.
3. Clean surfaces to be painted 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	Yttrium Phosphate $Y_2O_3-P_2O_5$
Max Use Temperature Est.	1500 C (2732 F)
Use Atmosphere	All
Fired Composition	>90% $Y_2O_3-P_2O_5$
Liquid Carrier	Water
Binder Phase	Al_2O_3
Brookfield Viscosity (cps)	1400 @ 3/60
Specific Gravity	1.48
Color	Gray
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

Note: Due to thermochromism, coating can appear yellow to orange if observed while heated in air or inert atmospheres.

Sizes and colors

Zypcoat YPO is a gray colored paint.

Standard Size: 1 gallon, 1 quart
wide mouth Nalgene container

CAUTION: DO NOT CONTACT WET COATINGS WITH MOLTEN METAL.

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