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PrimeStop LPO

Lanthanum Phosphate Coating

PrimeStop LPO is a premium interaction barrier/ stop-off water-based coating of Lanthanum Phosphate (LaPO₄). PrimeStop LPO has very high use temperature and is non-reactive with many molten materials – metals, alloys, glasses. Also, PrimeStop LPO coating has good adherence to metal or ceramic substrates and is usable to 1500 C with most conditions and atmospheres.

Key Attributes

- Non-reactive with most materials ... metals, alloys, glasses, even in molten state
- Relatively inert with Al-Li alloy melts
- Excellent adherence to substrates at high temperatures
- Usable to 1500 C
- Water-based, easy to use and cleanup

Ideal Use

- Molten Al-Li alloys or other 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 dry thoroughly before use. If the coated article is not exposed to high temperatures shortly after drying, it is recommended to heat the coating in air to 250-300 C to ensure good handleability.

Safety Information

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



Specifications

Active Ingredient	Lanthanum Phosphate (LaPO ₄)
Max Use Temperature Est.	1500 C (2732 F)
Use Atmosphere	All
Fired Composition	>85% LaPO ₄
Liquid Carrier	Water
Binder Phase	2Y ₂ O ₃ *Al ₂ O ₃
Brookfield Viscosity (cps)	1200 @ 3/60
Specific Gravity	1.50
Color	White
Shelf Life (months)	>12
Coverage (ft ² /gal)	100 to 400
Coating pH	3-4
H F R Ratings	1-0-0
Substrate Use	All

Note: due to thermochromism, this coating can appear yellow to orange if observed when heated in air or inert atmosphere.

Sizes and colors

PrimeStop LPO is a white 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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