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PrimeStop SC

Silicon Carbide Coating

PrimeStop SC is a premium interaction barrier/ stop-off water-based coating of Alpha-Silicon Carbide (α -SiC). PrimeStop SC is non-reactive with many materials, including molten aluminum-lithium alloys. Additionally, PrimeStop SC has good adherence to ceramic substrates, and is usable to >1100 C with all atmospheres.

Key Attributes

- · Non-reactive with many materials
- Relatively inert with Al-Li alloy melts
- High emissivity/high thermal conductivity
- Excellent adherence to ceramics at high temperatures
- Usable to 1100 C in air and other atmospheres
- Water-based, easy to use and cleanup

Ideal Use

- Molten Al-Li and nonferrous metal processing
- Barrier coating to reduce diffusion/reactions/interactions
- Whenever a high emissivity/blackbody coating is required

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	Silicon Carbide (α-SiC)
Max Use Temperature Est.	>1100 C (>2012 F)
Use Atmosphere	All
Fired Composition	>85% α-SiC
Liquid Carrier	Water
Binder Phase	$2Y_2O_3*AI_2O_3$
Brookfield Viscosity (cps)	1200 @ 3/60
Specific Gravity	1.40
Color	Gray
Shelf Life (months	>12
Coverage (ft²/gal)	100 to 400
Coating pH	2
H F R Ratings	1-0-0
Substrate Use	Ceramics

Sizes and colors

PrimeStop SC 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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