Z Guard

Unstabilized Zirconia / Aluminum Phosphate Water-Based, Relatively-High-Hardness Coating

Z-Guard is a moderately-low-viscosity, water-based paint that yields a relatively high hardness coating that is 86% Zirconium Oxide [Unstabilized] after heating >600 C (>1100 F). Easy-to-use coating that is good for all atmospheres to 1550 C (2822 F).

Key Attributes

- Forms Tough/Abrasion-Resistant Layer on Most Substrates -- Sintered-Fused-Silica; Fiber Blankets, Boards, Felts; Porous Bricks; Pulp-Molded Ceramics

- Low Electrical Conductivity

- Very Low Thermal Conductivity

- Applied Like House paint

Ideal Use

- Surface Sealant, Stopping Dusting/Spalling
- Protective Layer for Fibrous Surfaces
- Low-Thermal-Conductivity 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

Specifications

Active Ingredient	ZrO_2*
Max Use Temperature	
Air/Inert/ Vac (no C)	2822 F / 1550 C
Vac (with C present)	NOT RECOMMENDED
Use Atmosphere	All
Fired Composition	86% ZrO_2
Liquid Carrier	Water/Ethanol
Binder Phase	Al_2O_3-P_2O_5
Brookfield Viscosity (cps)	115-310 @2/60
Specific Gravity	2.2
Color	Cream
Shelf Life (months)	3-6
Coverage (ft^2/gal)	100 to 400
Coating pH	3
H F R Ratings	1-1-0
Substrate Use	All
Other:	* Contains no stabilizer oxides & no silica

Sizes and colors

Z-Guard is a cream-colored paint.

Standard Size: 1-gallon pail

CAUTION: DO NOT CONTACT WET COATINGS WITH MOLTEN METAL.