Diamond Vogel
Heavy Duty Protective Coatings

AZ-2402
Cote-All
Hi-Heat Silicone Aluminum

Technical Data

Product Description

A high performance, high temperature resistant coating which meets Federal Specification TT-P-28E. Withstands operating surface temperatures up to 1200° F.

Intended Uses

Exteriors of steel structures exposed to high temperatures: incinerators, drying kilns, stacks and similar high heat equipment.

Physical Properties

Color	Aluminum
Finish/Sheen	Satin
Resin Type	Silicone Alkyd
Reduction Solvent	Diamond Vogel N-3023 Xylol
Clean-up Solvents	Diamond Vogel N-3023 Xylol
Solids By Weight	49%
Solids by Volume	33%
Theoretical Coverage**	521 ft²/gal @ 1 mil
Dry Film Thickness / Coat	.75 - 1 mils (18.75 - 25 microns)
Wet Film to Achieve DFT	2 - 3 mils (50 - 75 microns)
Coverage at DFT**	521 - 695 ft²/gal @ .75 - 1 mils DFT
VOC's	4.37 lbs./gal. (524 grams/liter) unthinned 4.48 lbs./gal. (538 grams/liter) thinned
Thinning	Should not be necessary. If needed, add upto 1/2 pint Diamond Vogel N-3023 Xylol (spray application) per gallon.
Temperature Resistance (Dry)	1200°F (648°C)

Drying Time* (hours) **[**ASTM D 1640**]**

At 70°F (21°C)
Dry to Touch - 1 hours
Recoat Time - 4 to 8 hours

*** Dry times vary with surface temperature, air movement, humidity and film thickness.**

**** Coverage rates are estimates based on the products volume solids and make no allowance for material loss during application. Actual spread rates may vary dependent on applicator experience, surface porosity and texture.**

Cure Procedure

AZ-2402 Hi Heat Silicone Aluminum must go through a proper cure cycle in order to withstand service temperatures above 200° F (93° C). After the final coat is applied it must be allowed to dry for 24 hours at 70° F (21° C) and 50% R.H.; lower air temperatures and higher humidity will lengthen this time requirement. After the coating has dried, the surface temperature should be elevated to between 300° F - 400° F (148° C - 204° C) for one hour. After this temperature range has been achieved, allow the surface to cool to ambient temperature and then put into full service.

Recommended Primers

AZ-2402 Cote-All Hi Heat Silicone Aluminum (Self priming)

Performance

Performance criteria meet or exceed Master Painters Institute (MPI) # 2 approval standards.

Surface Preparation

All surfaces must be cured, clean, sound, dry and free of all dirt, dust, efflorescence, wax, oil, grease, chalk and any other contamination that would interfere with new coating adhesion. Bare surfaces must be properly prepared and prior to application of this product.

Ferrous Metal and Previously Painted Metal Surfaces

Power or hand washing is recommended to remove contamination. If oil or grease is present, use of a cleaner/degreaser is required. Do not phosphatize. All cleaning residue must be completely rinsed from the surface. Allow to dry. Dry abrasive blast according to SSPC-10 near white blast. Blast to achieve a 1 - 1 ½ mil anchor profile. NOTE: Recoating is most successful when operating temperatures do not exceed 204° C (400° F) and dry film thickness of recoat does not exceed 1mil. Complete removal by Near White blast is recommended when redoing surfaces operating at temperatures greater than 204° C (400° F).

Application

Avoid building a thick film with this product. Ending DFT should not exceed 1 mil per coat. Stir material prior to application. Intermix containers to ensure color uniformity of all material. Minimum surface and air temperature required for application is 40° F (4° C) and at least 5° F (3° C) above the dew point. Curing is affected by temperature, humidity and air movement. Cold temperatures will greatly increase drying time. Application at elevated temperatures, wind conditions, and/or low humidity may require special application procedures to achieve proper film formation. To insure adequate film build, two coats are recommended at .75 - 1 mil DFT per coat (See the drying times chart for recoat period). Allow the product to dry between coats.

Brush or Roller:

A good quality natural bristle brush will make application easier. Select a roller cover suited for the texture of the surface to be coated Apply product in full even coats. Maintain a wet edge.

Airless Spray:

Flush airless lines with Diamond Vogel N-3023 Xylol. Equipment must be clean prior to start. Thin only as needed for workability. Apply the product in even coats and maintain a wet edge. Use multiple passes to achieve film build. Allow the product to dry between coats.

Tip Orifice	*Atomizing Pressure*	*Mat'l Hose ID*	*Manifold Filter*
0.011" to 0.013"	2500-3000 psi	1/4"	100 mesh

Safety Precautions

Paint products contain chemical ingredients which are considered hazardous. Prior to use, read container label warnings and the current Material Safety Data Sheet for important health and safety information. Insure these instructions are practiced during product application and cure. **Keep out of the reach of children.**

Limited Warranty

The technical data and suggestions for use contained in this document are true and correct to the best of our knowledge at the date of issuance. The statements of this document do not constitute a warranty, expressed or implied, as to the performance of these products. Since Diamond Vogel Paints does not control the application of its products, or the condition of,the surfaces to which they are applied, Diamond Vogel Paint's liability will under no circumstances exceed replacement of the product. **All technical information is subject to change without notice.**

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