



3.5 VOC Universal Alkyd Primer

VBA Series

VBA-435 Light Gray
VBA-735 Red Oxide

VBA is a one component, alkyd primer that exhibits good corrosion resistance properties, when applied over properly prepared hot or cold-rolled steel. VBA has a Ready-to-Spray VOC of 3.5 lbs/gal.

VBA series primers feature fast dry-to-topcoat times and improve productivity in a wide variety of production and fabrication applications.

Features and benefits:

- 3.5 VOC Products
- Factory packaged in 2 colors
- One component primer

Associated Products:

- VBA-435 High Build Alkyd Primer (Gray)
- VBA-735 High Build Alkyd Primer (Red Oxide)

Physical Constants: *All values are theoretical, depend on color and are Ready-to-Spray.
Actual values could vary slightly due to manufacturing variability.*

	VBA-435	VBA-735
Percent solids (by weight)	72.46%	71.86%
Percent solids (by volume)	51.37%	53.15%
Flash Point	48°F (9°C)	48°F (9°C)
HAPs	≤ 1.7 lbs/gal	≤ 2.4 lbs/gal
Photo-chemically reactive	No	No
Volume Ratio	As is	As is
Applicable Use Category	Primer Sealer	Primer Sealer
VOC Actual (g/L)	418	405
VOC Actual (lbs/gal)	3.49	3.38
VOC Regulatory (less water less exempt) (g/L)	418	405
VOC Regulatory (less water less exempt) (lbs/gal)	3.49	3.38
Density (g/L)	1522	1443
Density (lbs/gal)	12.69	12.03
Volatiles wt. %	27.5	28.1
Water wt. %	0.0	0.0
Exempt wt. %	0.0	0.0
Water vol. %	0.0	0.0
Exempt vol. %	0.0	0.0



VBA Series Primers

Directions for Use

Substrate Preparation:

The surface to be coated must be free of all contamination (including dust, dirt, oil, grease, and oxidation). A chemical treatment (or conversion coating) will improve adhesion and performance properties of the finished coat. Variability can occur with substrates, preparation, application method or environment. We recommend that adhesion and system compatibility be checked prior to full application.

Metal	Direct to Substrate
Cold Rolled Steel	Good
Hot Rolled Steel	Good
Galvaneal	Not Recommended
Galvanized	Not Recommended
Aluminum	Fair
Plastic / Fiberglass	Surface should be free of all contamination. Because of the variability of plastic/fiberglass substrates, coating performance should be confirmed on the actual plastic/fiberglass substrate being used.

Note: For acceptable compatibility between this primer and CPC topcoats please see the CPC Primer/Topcoat compatibility chart (CPCTB01).

Mix Directions:



Mix Directions	VBA is ready to spray as supplied. Stir thoroughly before, and occasionally during use.
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Thinning:	Not recommended where 3.5 lb./gal VOC regulations are in effect. VBA is supplied at sprayable viscosity. May add 10% Acetone (Q30) if desired.
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Blend Ratio	N/A – Product is ready-to-spray
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Pot Life @ 77°F (25°C):	N/A
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Spray Viscosity Range:	VBA-435, # 3 EZ Zahn = 13 – 17 seconds VBA-735, # 3 EZ Zahn = 16 – 21 seconds
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Unopened Shelf Life: (each component)	1 year
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Application Equipment:



Conventional (with or without pressure pot):	1.4 – 1.8 mm needle/nozzle, 40 – 50 psi at the gun
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HVLP (with or without pressure pot):	1.3 – 1.6 mm needle/nozzle, 10 psi at cap or per manufacturer
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Airless:	Not recommended
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Air-Assisted Airless:	Not recommended
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Brush or Roll:	Not recommended
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Electrostatic:	For improved electrostatic capability, Acetone (Q30) or MEK (Q60) may need to be added in small increments.
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Application:



Apply:	1 – 2 medium to wet coats with a 10 – 15 minute flash between coats.
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Recommended Wet Film Build:	3.8 – 5.0 mils per coat
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Recommended Dry Film Build:	1.8 – 2.4 mils per coat
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Square Foot Coverage @ 1mil no loss:	824 – 848 sq. ft. depending on primer color
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Dry Times:



Air Dry @ 77°F 50% RH:	
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To Touch	15 minutes
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To Handle	15 – 30 minutes
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To Dry	24 hours*
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To Topcoat	After 1 hour to 4 days**
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To Recoat	1 hour to 4 days**
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Force Dry @ 160°F:	20 minutes at 160°F after 10 minute flash at 77°F.
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* Paint film is not fully cured for 7 days. Drying time listed may vary, depending upon film build, color selection, temperature, humidity and degree of air movement.

** After 4 days, the coating must be mechanically abraded and cleaned prior to topcoating or recoating.

VBA Series Primers

Technical Data*

Performance Properties:

System:
Bonderite 1000
VBA-435

Test	ASTM Method	Result
Adhesion	D3359	5B (P/S)
Gravelometer	D3170	1 – 2
In Service Temperature Limit		200°F

Chemical Resistance:

System:
Bonderite 1000
VBA-435

Chemical	ASTM Method	Result
10% NaOH (Sodium Hydroxide)	D1308	Good
10% HCl (Hydrochloric acid)	D1308	Good
10% H ₂ SO ₄ (Sulphuric acid)	D1308	Good
Gasoline	D1308	Fair
Water**	D1308	Good

** Although resistant to intermittent exposure, this product is not recommended for immersion.

Weather Resistance:

System:
Bonderite 1000
VBA-435
ALK-300E

	ASTM Method	Result
Salt Spray – 250 hours	B117	
Corrosion Creep	D1654	7A
Scribe Blisters	D714	8M
Face Blisters	D714	None
Humidity – 100 hours	D2247	
5 Minute Recovery Adhesion	D3359	5B (P/S)
1 Hour Recovery Adhesion	D3359	5B (P/S)
24 Hour Recovery Adhesion	D3359	5B (P/S)

All tests results assume proper cure and preparation of test substrates. Unless otherwise stated, all results were obtained spraying product direct to metal on Bonderite 1000.

* The application and performance property data above are believed to be reliable based on laboratory findings. It is for the buyer to satisfy itself on the suitability of the product for its particular use. Variation in environment, procedures of use, or extrapolation of data may cause unsatisfactory results.

Miscellaneous

This product should not be applied to zinc substrates.

Safety:



These materials are designed for application only by professional, trained personnel, using proper equipment under controlled conditions and are not intended for sale to the general public.

Safe application of paints and coatings requires knowledge of equipment, materials and individual training. Directions and precautionary information on both equipment and products should be carefully read and strictly observed for personal safety and property protection. Consideration must be given to eliminate conditions, which may generate hazardous atmospheres during spray application or subject operators or bystanders to injury or illness.

Special precautions must be taken when utilizing spray equipment, particularly airless equipment. High-pressure injection of coatings into the skin by airless equipment may cause serious injury requiring immediate medical attention at a hospital. Treatment advice may also be obtained from Poison Centers.

Air quality should be maintained with adequate ventilation; applicators can achieve additional protection by wearing respirators and other protective garments such as gloves and overalls. In all cases, wear protective eye equipment. During the application of all coatings materials, all flames, welding and smoking must be prohibited. Explosion proof equipment must be used when coating these materials in confined areas.

PRECAUTIONARY INFORMATION

Before using the products listed herein, carefully read each product label and follow directions for its use. Please read and observe all warnings and precautionary information on all product labels. Prevent all contact with skin and eyes and breathing of vapors and spray mist. Repeated inhalation of high vapor concentrations may cause a series of progressive effects including irritation of the respiratory system, permanent brain and nervous system damage and possible unconsciousness and death in poorly ventilated areas. Eye watering, headaches, nausea, dizziness and loss of coordination are indications that solvent levels are too high. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

KEEP OUT OF THE REACH OF CHILDREN

MEDICAL RESPONSE

Emergency Medical or Spill Control Information (412) 434-4515; CANADA (514) 645-1320
Have label information available.



Material Safety Data Sheets for the PPG products mentioned in this publication are available through your PPG Distributor.

For additional information regarding this product, see the MSDS AND LABEL information.

PPG Industries Commercial Coatings

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