Commercial Performance Coatings

CPCPB116

High Build Alkyd Primer

HBA Series

HBA-9XX High Build Alkyd Primer (Tintable)
HBA-4035 High Build Alkyd Primer (Gray)
HBA-5035 High Build Alkyd Primer (White)

HBA Series Primers are one component alkyd primers that exhibit very good corrosion resistance properties when applied over properly prepared hot- or cold-rolled steel. They feature fast dry-to-topcoat times enabling improved productivity in a wide variety of production and fabrication applications.

This series is lead and chromium-free and tintable to custom color requirements. If desired, this series is suitable as a primer only finish (stain).

Features and Benefits:

- One component, easy to spray
- Very good corrosion resistance
- Fast dry for improved productivity
- Smooth, high build finish

Associated Products:

- HBA-9XX High Build Alkyd Primer (Tintable)
- HBA-4035 High Build Alkyd Primer (Gray)
- HBA-5035 High Build Alkyd Primer (White)

Physical Constants:

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

	HBA-9XX w/tint	HBA-4035	HBA-5035
Percent solids (by weight)	67.8 – 69.3%	71.0%	69.8%
Percent solids (by volume)	48.1 – 49.0%	50.9%	48.8%
HAPs	≤ 0.1 lbs/gal	≤ 1.3 lbs/gal	≤ 0.1 lbs/gal
Photo-chemically reactive	No	Yes	No
Flash Point HBA-9XX (untinted) = 1°F (-17°C) HBA-4035 = 70°F (21°C) HBA-5035 = 48°F (9°C)			
RTS Combinations:	**HBA-9XX w/tint**	**HBA-4035**	**HBA-5035**
Volume Ratio	As is	As is	As is
Applicable Use Category	Primer Sealer	Primer Sealer	Primer Sealer
VOC Actual (g/L)	261 – 267	406	268
VOC Actual (lbs/gal)	2.17 – 2.23	3.39	2.24
VOC Regulatory (less water less exempt) (g/L)	323 – 333	406	332
VOC Regulatory (less water less exempt) (lbs/gal)	2.70 – 2.78	3.39	2.77
Density (g/L)	1316 – 1353	1403	1390
Density (lbs/gal)	10.98 – 11.29	11.7	11.59
Volatiles wt. %	30.7 – 32.1	29.0	30.2
Water wt. %	0.0	0.0	0.0
Exempt wt. %	11.5 – 11.8	0.0	10.9
Water vol. %	0.0	0.0	0.0
Exempt vol. %	19.7	0.0	19.2

PPG

HBA Series Primers

Directions for Use

Substrate Preparation:

The surface to be coated must be sanded and 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	Very Good
Hot Rolled Steel	Very 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:	Product is ready-to-spray as supplied. Stir thoroughly prior to and occasionally during use.
Thinning:	HBA series of products are supplied at sprayable viscosity. Thinning not recommended where 2.8 or 3.5 lbs/gal VOC regulations are in effect.

Blend Ratio:	Product is ready-to-spray
Pot Life @ 77°F (25°C):	N/A
Spray Viscosity Range:	#3 Zahn: 10 – 30 seconds
Unopened Shelf Life:	Gallons = 2 years Drums = 1 year Pails = 2 years

Application Equipment:

Conventional (with or without pressure pot):	1.4 – 1.8 mm needle/nozzle, 50 – 60 psi at the gun
HVLP (with or without pressure pot):	1.3 – 1.6 mm needle/nozzle, 10 psi at cap or per manufacturer
Airless:	No recommendation
Air-Assisted Airless:	No recommendation
Brush or Roll:	Not recommended
Electrostatic:	Additional solvent may be needed to spray electrostatically

Application:

Apply:	1 – 2 medium coats with a 10 minute flash between coats. Apply only when air, product, and surface temperature is above 60°F (16°C) and when surface temperature is at least 5°F (3°C) above the dew point.
Recommended Wet Film Build:	3.7 – 5.0 mils per coat
Recommended Dry Film Build:	1.8 – 2.4 mils per coat
Square Foot Coverage @ 1mil no loss:	772 – 816 sq. ft.

Dry Times:

Air Dry @ 77°F 50% RH:

To Touch*	10 minutes
To Handle*	60 minutes
To Topcoat**	After 1 hour to 4 days
To Recoat**	After 1 hour to 4 days
Force Dry @ 160°F:	20 minutes after a 10 minute air dry

* *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.*

HBA Series Primers

Technical Data*

Performance Properties:

System:
BONDERITE® 1000
HBA-9xx (tinted gray)

Test	ASTM Method	Result
Pencil Hardness	D3363	F
Adhesion - Steel	D3359	3B
Chip Resistance	D3170	1
Impact (direct/indirect)	D2794	30 / 5 in·lbs
In Service Temperature Limit		200°F

Chemical Resistance:

System:
Bonderite 1000
HBA-9xx (tinted gray)

Chemical	ASTM Method	Result
Distilled Water**	D1308	Pass
10% H_2SO_4 (Sulphuric acid)	D1308	Medium gloss loss, blisters
10% HCl (Hydrochloric acid)	D1308	Slight gloss loss
10% NaOH (Sodium Hydroxide)	D1308	Slight film softening
Unleaded Gas	D1308	Severe softening and lifting
Diesel	D1308	Slight softening
Motor Oil	D1308	Pass

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

Weather Resistance:

System:
Bonderite 1000
HBA-9xx (tinted gray)
ALK-300E white

	ASTM Method	Result
Salt Spray – 500 hours	B117	
Corrosion Creep	D1654	7A
Scribe Blisters	D714	6M, 8D
Face Blisters	D714	None
Humidity – 100 hours	D2247	
5 Minute Recovery Adhesion	D3359	2B
1 Hour Recovery Adhesion	D3359	2B
24 Hour Recovery Adhesion	D3359	3B

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.

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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 and in MÉXICO 01-800-00-21-400. Have label information available.

Safety Data Sheets (SDS) for the PPG products mentioned in this publication are available through www.ppgcommercialcoatings.com (Safety, SDS Search) or your PPG Distributor.

For additional information regarding this product, see the SDS and LABEL information.

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