

Water Reducible Alkyd Primer

AWP-x33 Series

AWP- 433 - Gray
AWP- 733 - Red Oxide
AWP- 933 - White

AWP-x33 Series water reducible primers are fast drying interior/exterior primers intended for industrial use on bare or primed metal surfaces. Suitable applications include metal fabrication, cabinets, structural steel and shelving.

These primers provide a wide balance of performance properties, very good gloss and holdout properties when topcoated.

Features and Benefits

- One component water reducible primer
- Factory packaged in key primer colors

Associated Products:

- AWP- 433 Water Reducible Alkyd Primer - Gray
- AWP- 733 Water Reducible Alkyd Primer – Red Oxide
- AWP- 933 Water Reducible 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.*


	AWP-433	AWP-733	AWP-933
Percent solids (by weight)	46.78%	44.95%	45.49%
Percent solids (by volume)	32.06%	30.98%	30.99%
Flashpoint	122°F (50°C)	122°F (50°C)	122°F (50°C)
HAPs	< 0.30 lbs/gal	< 0.30 lbs/gal	< 0.30 lbs/gal
Photo-chemically reactive	No	No	No
RTS Combinations:	AWP-433	AWP-733	AWP-933
Volume Ratio:	As is	As is	As is
Applicable Use Category	Primer Sealer	Primer Sealer	Primer Sealer
VOC Actual (g/L)	177	171	171
VOC Actual (lbs/gal)	1.48	1.43	1.43
VOC Regulatory (less water less exempt) (g/L)	339	340	340
VOC Regulatory (less water less exempt) (lbs/gal)	2.83	2.84	2.84
Density (g/L)	1221	1202	1214
Density (lbs/gal)	10.18	10.02	10.12
Volatiles wt. %	53.2	55.10	54.6
Water wt. %	38.5	40.6	40.2
Exempt wt. %	0.0	0.0	0.0
Water vol. %	47.1	48.8	48.8
Exempt vol. %	0.0	0.0	0.0

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Directions For Use


Surface 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	Not Recommended
	Plastic / Fiberglass	Not Recommended

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


Mix Directions:

	Mix Directions:	Mix thoroughly prior to and occasionally during spraying.
	Thinning:*	Water (up to 8% if needed)
	Blend Ratio	N/A
	Pot Life @ 77°F (25°C):	N/A
	Spray Viscosity Range:**	35 – 40 seconds (3- Zahn @ 77°F)
	Unopened Shelf Life: (each component)	6 months
*Only add water immediately prior to applying product.		
**a 10 – 15% reduction may be necessary to obtain these viscosities for spray application. Other application methods may not need water reduction.		


Application Equipment:

	Conventional (with or without Pressure Pot):	1.4 – 1.8 mm needle/nozzle, 55 – 65 psi at the gun
	HVLP (with or without Pressure Pot):	1.4 – 1.8 mm needle/nozzle, 10 psi at cap or per manufacturer
	Airless:	.013 – .015 mm: 1800 – 2300 psi fluid pressure
	Air-Assisted Airless:	.011 – .013 mm: 1000 – 1500 psi fluid pressure: 30 – 50 psi atomizing air
	Brush or Roll:	High quality synthetic bristle brush (touch-up only), 3/8" Nap solvent resistant core roller.
	Electrostatic:	Not recommended

Application:

	Apply:	1 - 2 wet coats with a 10 minute flash between coats
	Recommended Wet Film Build:	4.8 – 5.5 mils
	Recommended Dry Film Build:	1.4 – 1.6 mils
	Square foot Coverage @ 1 mil no loss:	497 - 514 sq. ft. / gal

Dry Times:

	Air Dry @ 77°F 50% RH	
	To Touch	15 minutes
	To Handle:	20 – 30 minutes
	To Topcoat/Recoat:	After 30 minutes
	Force Dry @ 160°F	10 – 20 minutes after 10 minute flash
*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.		

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Technical Data*

Technical Properties:

Test	ASTM Method	Result
Pencil Hardness	D3363	B
Conical Mandrel	D522	Pass
Adhesion	D3359	5B
Impact Resistance (direct/reverse)	D2794	100/80 in*lbs
Gloss	D523	< 10
In Service Temperature Limit:		150°F

† Film color may yellow or darken as 150°F is approached; however, the film integrity will be maintained.

Weather Resistance

Bonderite 1000
AWP-433

	ASTM Method	Result
Salt Spray – 250 hours	B117	
Corrosion Creep	D1654	2A
Scribe Blisters	D714	2F
Face Blisters	D714	None
Humidity – 24 hours	D2247	
Blisters	D1654	2M, 4M

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.
- This primer must be thoroughly dried prior to application of solvent based topcoat.
- Do not apply this product if temperature is below 50°F.
- Excessive film thickness and high humidity can slow dry times.
- Dry times can be improved with air movement.
- Protect from freezing.

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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 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
We're Everywhere You Look

PPG Industries
19699 Progress Drive
Strongsville, OH 44149
1-800-647-6050

PPG Canada Inc.
2301 Royal Windsor Drive, Unit #6
Mississauga, Ontario L5J 1K5
1-888-310-4762

