

PRODUCT DATA SHEET



ENGINEERED BY:
APV
ENGINEERED COATINGS

W-1650 Bonding Primer
Water-Based
Field-applied Primer System
PRODUCT #: W-1650

W-1650 BONDING PRIMER

PRODUCT DESCRIPTION:

W-1650 Bonding Primer is high performance coating ideal for exterior use over steel and factory coated surfaces such as Kynar® 500 and silicone polyester. The product is engineered to have excellent surface adhesion and intercoat adhesion to APV's topcoat systems. W-1650 is water-based in composition and contains low VOC content. It also provides excellent early water resistance and does not flash rust. It is easy to apply via conventional spray equipment, brush or roller.



PHYSICAL PROPERTIES:

Product Description:	W-1650 Bonding Primer
Product Number:	W-1650
Number of Components:	One
Color:	Gray, other colors upon request
Type:	Water-Based
Viscosity:	2000 cps (as supplied)
Weight per Gallon (ASTM D 1475-90):	8.4 - 9 lbs/gal (1 - 1.08 g/ml)
Gloss @ 60°	< 15
pH:	8.5 - 9.5
Flash Point:	212 °F (100 °C)
Solids:	37.8 % by weight 30.9 % by volume
VOC:	21 g/l
Recommended Film thickness:	3 - 4 mil (wet) 1 - 1.25 mil (dry)
Coverage:	400 - 450 sq ft/gal
Dry Time: (dependant on air temperature/humidity)	To touch: 15-30 min. Re-coat: 6 hours
Shelf Life:	12 Months Unopened
Freeze Caution:	Keep from freezing
Recommended Storage:	Cool Dry Storage

SUBSTRATES:

W-1650 Bonding Primer is recommended for Steel and coated surfaces such as Kynar® 500 and silicone polyester. Other substrates are acceptable, contact APV Engineered Coatings' Technical Department for approval and guidelines on application.

TINTED COLORS:

W-1650 Bonding Primer can be tinted for hiding purposes under special request. Colors are custom matched to order.

PACKAGING:

W-1650 Bonding Primer is ready-to-use as supplied. Packaging sizes include: 1 gallon cans, 5 gallon pails and 55 gallon drums.

FEATURES:

Water-Based

Very Low VOC

Excellent Adhesion

Can be Applied to New and Aged Kynar® 500 Coated Surfaces

Resistant to Flash Rust

Provides Early Water Resistance

Easy to Clean or Flush with Water

Applies Easily with Conventional Spray Equipment, Roller or Brush

Manufactured in the USA

SUBSTRATE PREPARATION:

Although APV's coating systems have been designed to apply over a wide variety of surface types, some substrates require additional preparation. Always consult your APV technical representative regarding each project. In all cases, the substrate must be properly prepared as defined in the instructions below and tested using the ASTM D3359 Standard Test Methods for Measuring Adhesion by Tape Test prior to coating the surface. Follow the guidelines on surface preparation and application thoroughly by referencing the **Field Coatings Guide**. Inadequate surface preparation and application can lead to coating failure and/or under-performance.

APPLICATION:

TEMPERATURE AND ENVIRONMENTAL FACTORS

Ambient air temperature is pertinent to coating performance and cure. Be sure to check that the air, surface, and material are between 55°-85°F and at least 5°F above the dew point. Avoid application if precipitation is expected within 24 hours and/or if air or surface temperature is expected to drop below 35°F within two days. Do not apply primer in direct sunlight as the flow, leveling and application characteristics will be adversely affected.

Wind Velocity | High wind velocity can severely impair spray application which can result in loss of materials, low film build, excessive dry spray or overspray. It is recommended to delay work until wind conditions are below 15 m.p.h.

Dust and Contamination | Work areas should be protected from conditions where dust and contamination are possible during the application and curing process. Dust and contaminants that settle on fresh applied coatings can impair the integrity of the coating leading to a shorter coating life and reduced performance. Please ensure your work area is free from dust and contaminants. If any previous coatings accumulate dust or contaminants, remove those before adding succeeding coats.

Mixing and Thinning | W-1650 Primer should always be mixed thoroughly before use with an air mixer for 10-15 minutes. No reduction necessary for brush or roll application; however, small amounts of cool, clean, water can be added if needed to optimize viscosity for spray application.

Ventilation | Always use adequate ventilation and proper NIOSH approved respirator when applying NeverFade® topcoats and associated primer systems. Avoid breathing mist or sanding dust created by the application or surface preparation.

FILM THICKNESS AND SPREADING RATE

Theoretical spreading rates can be used as a rough guide for determining film thickness. However, to ensure proper film thickness, wet thickness readings should be taken at random locations immediately after application. A Nordson Wet Film Gauge or similar instrument may be used for this purpose.

Dry film thickness may be measure on ferrous metals using a magnetic gauge following the procedure outlined in SSPC-PA2, Sections IV, Paint Thickness Measurement. Readings should be taken in accordance with the specifications standards mentioned above.

Applying the appropriate film thickness is important to the performance characteristics of the coating. Be careful not to apply too heavy of a coat. Excessive paint on the surface may result in runs and sags as well as weak spots in the film. A heavy coat weight may also change the drying properties causing wrinkling or cracking, and adversely affect intercoat adhesion.

BRUSH, ROLL AND SPRAY APPLICATION

W-1650 Primer can be applied with a brush, roller, or spray equipment. When using a spray application, it is advisable to back-roll surfaces to assure proper wetting of the substrate. Products can be reduced as necessary for spray with water.

Brush | Nylon/Polyester Brush

Roller | 3/8"-3/4" nap cover

Contentional, HVLP, Airless, & Air Assisted Airless | Consult an APV Equipment Specialist for recommendations on spray tips, caps, nozzles, fluid and air pressures.

CLEANUP INFORMATION:

Always observe good professional hygiene practices and wash hands thoroughly after using our products. Clean hands immediately after use with soap and water. Use water to thoroughly clean application equipment. This will keep the primer from curing onto the surfaces. Any cured or dried coating left on the equipment will have to be removed with standard grade paint thinner. After cleaning, flush spray equipment with water or a water/solvent blend.

CAUTIONS. It is necessary for the integrity of the job that contractors ensure all personnel are properly protected from hazards when coating, or blast cleaning. There are numerous OSHA standards that cite how, where, and when workers need to be protected. You should consult OSHA, local, and equipment officials before starting the job to ensure your complete compliance with the law to avoid any liability issues. Product labels, Product Data Sheets, and Safety Data Sheets should always be consulted prior to any coating operations, and safety and health details should be addressed prior to implementing these operations.

Always dispose of dry, empty containers in compliance with local or state regulatory codes. First Aid: In case of eye contact, flush with water for 15 minutes. In case of skin contact, wash with soapy and water. If you experience difficulty breathing, seek a fresh source of air. In all cases, if you continue to experience discomfort, seek medical attention immediately. All products are for professional use only. Do not take internally. Keep out of reach of children. **Refer to the Material Safety Data Sheet for safety instructions.**

WARNING! Removal of old paint may generate fumes and dust that contain lead. This may be a step in the surface preparation process outlined previously. Lead can cause serious health issues. For more information regarding the proper protective equipment, containment, and cleanup for the removal of lead based paints contact the **National Lead Information Center at 1.800.424.LEAD** or contact your local health authority.



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NOTE: The information and data given herein are based upon tests and reports considered reliable and are believed to be accurate. However, due to varied application and handling methods, no guarantee of duplicate performance, expressed or implied, is made.

*NeverFade® uses a specialized pigment system. Some colors may not incorporate this pigment system which, therefore, will not be covered under the warranty. APV will notify all customers if the chosen color falls outside of this system.

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