

Technical  
Data Sheet



Willamette Valley Company

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Partnering through service,  
innovation, and integrity

# POLYQuik<sup>®</sup> Aluminum Primer (SB)

## Fast Drying Primer for Aluminum Surfaces

### DESCRIPTION

POLYQuik<sup>®</sup> Aluminum Primer (SB) is an ULTRA-LOW VOC primer that dries quickly to provide excellent spray elastomer adhesion to aluminum surfaces. Aluminum Primer (SB) is easy to apply with a HVLP spray gun to prepared aluminum surface prior to applying a spray elastomer topcoat.

### WHERE TO USE

- **Walls & Floors**—clean aluminum surface
- **Under Coatings**—spray elastomer coatings
- **Aluminum Substrates**—parts or flat surfaces
- **OEM Operations**—fast production requirements

### FEATURES AND BENEFITS

- **Superior Adhesion**—clean aluminum surfaces
- **Ultra-Low VOC**—0.09 lbs/gal VOC
- **Non-hazardous Pigments**—free of chromates
- **Fast Drying**—dries quickly in humid conditions

### PACKAGING

1-Gallon (3.8 L) kit

### COLORS

Black

### YIELD

1300 ft<sup>2</sup> per gallon at 1.0 mils  
(120 m<sup>2</sup> per liter at 0.025 mm)

### SHELF LIFE

1 year when properly stored.

### STORAGE

Store and ship this product in a clean, dry, low-humidity, shaded or covered environment at 60 to 90° F (15 to 32° C).

## TECHNICAL INFORMATION

### Typical Properties

|   |                               |
|---|-------------------------------|
| <b>VOC</b> , lbs/gal (g/L), ASTM D 2369                 | 0.09                          |
| <b>Viscosity</b> , cps, ASTM D 4878, mixed              | 20                            |
| <b>Service temperature</b> , ° F (° C)                  | -22 to 135 (-30 to 57)        |
| <b>Potlife</b> , minutes                                | 60                            |
| <b>Recoat-window</b> , minutes                          | 30 to 240 at 70°F (21°C)      |
| <b>Topcoat adhesion</b> , max. lbf/in (N/m), ASTM D 903 | 28 (topcoat cohesive failure) |

### Cure Time

| Temperature, 50% RH | Ready for topcoat, minutes | Maximum recoat time, hrs |
|---------------------|----------------------------|--------------------------|
| 50° F (10° C)       | 30                         | 4                        |
| 70° F (21° C)       | 30                         | 4                        |
| 104° F (40° C)      | 15                         | 1                        |

### Processing Parameters

|   |                             |   |
|---|-----------------------------|---|
| <b>Ratio by volume</b> , (resin to iso) | 10 to 1                     |   |
| <b>Application temp</b> , ° F (° C)     | 50 to 105 (10 to 40)        |   |
| <b>Recommended thick.</b> , mils (mm)   | 0.5 to 1.0 (0.012 to 0.025) |   |
| <b>Spray equipment</b>                  | type                        | HVLP Siphon or HVLP Gravity                 |
|   | tip,(mm)                    | 0.06 - 0.07" (1.4 - 1.7),                   |
|   | psi (bar)                   | 10 (0.7) at tip - 30 (2.0) at gun regulator |

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## APPLICATION

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### SURFACE PREPARATION

1. Mechanically remove any sharp edges and other surface imperfections.
2. For maximum adhesion, clean and degrease surface with metal cleaner using a lint-free cloth. Abrade surface with 80 grit sand paper. After sanding repeat cleaning and degreasing with metal cleaner using a lint-free cloth. Contact WVCO for degreaser recommendations.
4. Mask off any area that is not to be primed.
5. Apply primer only if aluminum surface temperature is 5° F (3° C) above the dew point to avoid application over damp surface.
6. Apply primer and topcoat within 4 hours. Apply before the prepared surface is chemically contaminated. Re-clean surface that has been contaminated before applying primer or topcoat.

### PROCESSING

1. Precondition containers to approximately 70°F (21°C) for 24 hours before using. Choose a work area that is shaded and away from direct sunlight.
2. Resin must be mixed in its original container before combining with iso. Slowly mix resin with a mixing stick or drill with mixing blade until all pigment is distributed and color is uniform (usually 2 to 3 minutes). Scrape the bottom of resin container to ensure all pigment is dispersed.
3. Use marked containers to measure exact volumes of resin and iso. Choose a final volume that can be easily applied within 30 minutes.
4. Mixing containers must be clean and dry. Do not use containers contaminated with water or other liquids.
5. Measure volumes of resin and iso in separate containers.  
NOTE: MEASURE CAREFULLY, THE MIX RATIO IS CRITICAL.
6. Pour the pre-measured volumes of 10 parts resin, and 1 part iso into the appropriate mixing container.
7. Mix for 2-3 minutes, then scrape the sides and bottom of the container with a wooden straight edge and continue to mix for an additional 20 seconds. PROPER MIXING IS CRITICAL FOR GOOD PERFORMANCE. Signs of poor mixing include streaks or swirls, and tacky material that will not harden after application.
8. APPLY PRIMER AS IS AND DO NOT THIN WITH SOLVENT. USE IMMEDIATELY AFTER MIXING AS POT LIFE IS SHORT.  
Keep mixing container covered while primer is not being used.

### APPLICATION

1. Begin priming only if the topcoat can be applied within 4 hours of primer application. Make sure primer does not puddle, run, or build up in crevices.
2. Apply POLYQuik® Aluminum Primer (SB) no more than 1 mil (0.025 mm) wet film thickness. Applications thicker than 1 mil will result in poor primer performance and possible adhesive failure of the topcoat.

### SPRAY APPLICATION

1. This method is recommended for priming large areas, vertical areas, and narrow spaces.
2. Use a HVLP spray gun fitted with a 0.06-0.07" (1.4-1.7 mm) tip and set at an air pressure of approximately 10 psi (0.7 bar) at the tip and 30 psi (2.0 bar) at the gun regulator.

### CLEANING & MAINTENANCE

Clean equipment with POLYQuik® Cleaner or acetone immediately after use. Cured material must be removed mechanically.

NOTE: If topcoat time is exceeded, mechanically remove primer, degrease, and re-prime area.

NOTE: Proper application is the responsibility of the user. Field visits by WVCO Representative are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

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## HEALTH AND SAFETY

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Before handling, you should become familiar with the Material Safety Data Sheet (MSDS) regarding the risks and safe use of this product. To obtain an MSDS please call 800-333-9826 or send an email to: [msds@wilvaco.com](mailto:msds@wilvaco.com)

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