

## **W**Wilsonart®

# **PVA ADHESIVE**

### FOR POSTFORMING & PINCH ROLLING



#### **General Description**

- An emulsion of water and polyvinyl acetate suitable for bonding decorative laminate to wood products
- Glue spreader or spray application (glue spreader/pinch roller, glue spreader/hot press applications); suitable for postforming applications
- · Professional use only
- · High solids
- · Fast performance and high heat resistance
- · Does NOT require stirring before use

#### **Applications to Avoid**

- · Tempered hardboard products
- · Fire retardant treated board products
- Boards treated to be moisture resistant
- · Low pressure melamine surfaces
- · Metallic, polyester and painted surfaces
- · Liner grade laminate to plywood

#### **Availability**

5-gallon pails, 55-gallon drums and 275-gallon totes (returnable)

#### Storage/Shelf Life

- DO NOT ALLOW PRODUCT TO FREEZE.
- Close container tightly when not in use and store off the floor in a well ventilated area.
- · Rotate stock.
- Shelf life expires 1 year from manufacture date.

#### **General Use Instructions**

- Ensure substrates and adhesive are above 65°F.
- Best results are achieved between 70°F and 85°F.
- · Surfaces must be clean and dry.

#### **Hand Spray Instructions**

- Fluid pressure: 30 psi; atomizing air pressure: 60 psi; fluid line: 3/8" I.D. minimum (See equipment recommendations later in this document).
- Coat both surfaces evenly with 7-8 wet grams/ft² covering 100% of each surface. Coat each perimeter slightly heavier. Open time is 2-5 minutes. Bond immediately and before the adhesive film becomes more than 50% clear.
- Use mechanical pressure (pinch roller) on all assemblies greater than 4 ft². Otherwise, apply 30-40 psi uniform downward pressure using hand-held J-roller over 100% of the bonded area.
- Large assemblies may be routed or filed immediately.
   Assemblies less than 4 ft² should rest (5-10 minutes) prior to finishing. Use cover board to protect components against pulling, knocking or stress for one hour. Bond will usually reach full strength in 24 hours.

#### **Spray Equipment Recommendations**

- Binks: Gun: M95, M95 Auto, M61; Fluid Tip: 68ss (1-2 traversing heads), 66ss (3+ traversing heads), 66ss (edge/underwrap); Air Cap: 68PB (1-2 traversing heads), 66PJ (3+ traversing heads), 66R or 66PJ (edge/underwrap); Needle: 668 for 68ss fluid tip; 665 for 66ss fluid tip.
- DeVilbiss: Gun: JGA 510, MSA 510; Fluid Tip: D type; Air Cap: 64HD; Needle: D type

#### **Physical Properties**

Color: Pink

2850 cps (typical) Viscosity: Density: 9.0 lbs / gallon Solids Content: 58.0% ± 2.0% 4 - 5 (typical) nΗ· VOC Content: < 20 g / L (Meth. 24) VHAP Content: < 0.032 lbs / lbs solids Coverage (Spreader): ~ 229 ft2 / gal @ 7 wet mils Coverage (Spray): ~ 255 ft2 / gal (bonded) Hot Press Time: 1-2 minutes @40-50psi Open Time: 2-5 minutes

#### \*GREENGUARD® Certified

- \*Complies with SCAQMD, Rule 1168
- \*Complies with the Ozone Transport Commission (OTC)
- \*Qualifies for LEED®-NC & CI EQ Credit 3.2: Construction Indoor Air Quality Management Plan-Before Occupancy
- \*Qualifies for LEED®-NC & CI EQ Credit 4.1: Low Emitting Materials: Adhesives & Sealants
- \*Qualifies for LEED®-NC & CI EQ Credit 4.4: Laminating adhesives shall contain no added urea-formaldehyde resins.

#### **Flow-Through Postforming Instructions**

- Coat both deck surfaces evenly with 7-8 wet grams / ft² covering 100% of each surface. Coat board edge to be formed slightly heavier.
- Run laminate and core through drying oven that has been preset to achieve laminate exit temperature of 125°F-150°F. Adhesive film should appear dry (50% clear) but still soft to increased finger pressure.
- Index and apply uniform mechanical pressure (30–40 psi) while laminate temperature is at least 110°F.
- Postform per the manufacturer's recommendations. 180° bends should end on a flat area at least ¾" in width.

#### **Glue Spreader/Hot Press Instructions**

- Follow the glue spreader manufacturer's recommendations.
- · Use a dual durometer roller.
- Select a groove pattern appropriate for PVA adhesive.
- Apply 6-8 wet mils with glue spreader.
- Open time is 2-5 minutes.
- · Coating of only one surface is preferable.
- Assemble and hot press for 1-2 minutes under 40-50 psi and 180°F-200°F.
- · Allow panel to cool for 2-5 minutes.
- · Proceed with fabrication.

More information on page 2





#### Glue Spreader and Pinch Roller

Use a good commercially available glue spreader with the roller groove pattern (dual durometer) set for the application of PVA adhesives used for bonding High Pressure Decorative Laminate (HPDL) such as Wilsonart.

- 1. Set the wet adhesive film to a depth of  $7 \pm 1$  wet mil which will yield a spread rate of approximately 35 lbs of adhesive per 1000 square feet. With this method, the adhesive may be applied to one surface only, typically the particleboard or plywood substrate.
- 2. Assemble the materials as the substrate exits the glue spreader and move them immediately through the pinch roller. Under most conditions, this should be completed within 120 seconds. but the panel should not be flexed during the "set period" (typically 1 hour). Flexing the panel during this set period can cause separations between the laminate and substrate resulting in an intermittent bond.
- 3. At this point the panels should be allowed to rest on a flat surface for about one hour (when the environment and materials are at or above  $70^{\circ}F$ ) before further fabrication is attempted. During this period, it is recommended that the top sheet in the stack be covered (weighted down) by an additional sheet of similar substrate material. No further pressure is required after the pinch roller.

#### **Primary Contents**

Vinyl acetate homopolymer (CAS 9003207), Water (CAS 7732185), NJTSRN #990011 and #950002

#### Clean-up/Disposal

- · Clean with hot tap water while adhesive is wet.
- Removal of dried adhesive is very difficult. Use diluted ammonia to clean dry adhesive.
- · Wash water is RCRA non-hazardous.
- · Dispose of in accordance with regulations.

#### **GREENGUARD® Indoor Air Quality**

GREENGUARD Indoor Air Quality Certified Products meet the following minimum emission requirements:

Category: Adhesives/Sealants

<u>Emission Types</u> <u>Measure</u> Individual VOCs <0.1 TLV

Formaldehyde <0.05 ppm (<0.06 mg/m³)

 4-phenylcyclohexane
 <0.0065 mg/m³</td>

 Styrene
 <0.07 mg/m³</td>

 Total VOCs
 <0.05 mg/m³</td>

 Total aldehydes
 <0.1 ppm</td>

#### Safety

- Non-flammable
- · Mildly irritating to eyes
- May irritate sensitive skin
- · Inhalation may irritate respiratory tract
- See MSDS for more complete information
- 24-hour Chemtrec Emergency: 1-800-424-9300 (US),1-703-527-3887 (International)

#### Warranty

NO WARRANTY: WILSONART MAKES NO WARRANTIES, EXPRESS OR IMPLIED. NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL APPLY. The person using the product (the "User") is solely responsible for determining whether the Wilsonart product is appropriate and/or suitable for User's purpose and method of application.

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#### Contact

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