

## LIQUIDWELD™ 326

### *Lay Flat and Cold Laminating Adhesive*

#### **Product Description**

LIQUIDWELD 326 is a one component, low to medium viscosity PVA adhesive ideal for bonding paper, canvas, cloth, and decorative laminates to other materials. It can be used in cold laminating and auto-laminating equipment or applied by brush, roller or other means. The dried adhesive bonds will remain flat and unwrinkled.

The LIQUIDWELD 326 bonds to most materials including paper, canvas, and cloth and to surfaces including hardboard, wheatboard, strawboard and board products including most of those treated to be fire retardant or moisture resistant. It also develops excellent bonds to low pressure melamine surfaces, metals, polyesters, and many painted surfaces.

#### **Key Features**

- Dried bonds lay flat and do not pucker, wrinkle, or warp
- Forms strong bonds to most backing materials

#### **Typical Properties**

<b>UNCURED PROPERTIES</b>	
Appearance	Milky White Liquid
Viscosity (1)	1800 – 3500 cps
pH	4.5 - 5.5
Specific Gravity	1.15 – 1.17
Solids Content (2)	60% +/- 2%
VOC Content	< 40 g/L
Freeze-Thaw Stability	Do not freeze – may be damaged by freezing
Full Strength at 25°C	24 - 48 hours

(1) Brookfield Viscometer Model RVF, at 20 RPM at 25 C.

(2) Forced air oven 2 hours at 130 C. ( 110 C. if modified)

#### **CURED PROPERTIES:**

Glass Transition Temperature (Tg)	40°C
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**Note:** Not for Product Specification Purposes – these are typical values and based on 24 cure time. Please contact SP&S for assistance in writing purchasing specifications.

#### **Surface Preparation:**

Surfaces should be clean, dry and contaminant free before applying the adhesive. Use a suitable solvent (such as acetone or isopropanol) to degrease the surface if necessary. Some metals such as aluminum, copper and its alloys will benefit from light abrasion with emery cloth (or similar), to remove oxide layers prior to bonding. If this is done the bonding must be completed shortly after abrasion and cleaning or the oxide layer will reform.

#### **Application Instructions:**

Ensure surfaces and adhesive are above 65°F (18.3°C). Best results are achieved between 68°F - 86°F (20°C - 30°C. Higher temperatures may shorten the work-life and cause pre-mature drying and lower

temperatures may delay drying or lead to Apply the adhesive to one surface with a roller, glue spreader or other applicator. Typical application thickness is 5 – 8 wet mils of adhesives. Press surfaced together using a roller, laminator or press. Open time is approximately 5 minutes. Closed time is approximately 20 minutes and typical press time is 3-60 minutes at 40 -50 psi. However all of these details will vary with temperature, ambient humidity, and the porosity of the materials being bonded. In most applications it is desirable to water at least 2 hours after pressing / laminating before machining and heavy machining may need to wait up to 24 hours to ensure that de-lamination does not occur.

### **Clean-Up:**

Clean with hot tap water while adhesive is wet. Removal of dried adhesive may be difficult, try diluting ammonia with water to make a solution that will soften the dried adhesive and make it easier to remove.

### **Shelf-life and Storage**

Storage at 10°C – 35°C, in the tightly closed original containers and protect from freezing as this may damage the product. Shelf-life is 12 months from date of shipment in the closed container at the listed temperatures. If the material has been in a cold environment (below 65°F (18.3°C) allow to warm to room temperature prior to use.

### **FIRST AID**

In case of contact:

**Skin** – Immediately wash skin thoroughly with mild soap and water. Remove contaminated clothing and wash before reuse. Destroy contaminated shoes and other articles made of leather.

**Eyes** – Immediately flush eyes with plenty of water for 15 minutes and get prompt medical attention.

**Inhalation** - Remove person to fresh air. Administer oxygen or artificial respiration if necessary. Call a physician.

**Ingestion** - Do not induce vomiting. Dilute with plenty of water and contact physician immediately. Never give anything by mouth to an unconscious person.

### **DISCLAIMER:**

**IMPORTANT:** The following supercedes Buyer's documents. **SELLER / MANUFACTURER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PURPOSE.** No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller / Manufacturer be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results presented are based on controlled or laboratory work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended

**Specialty Polymers & Services, Inc. (SP&S)**

**27822 Fremont**

**Valencia, CA 91355**

**[www.spolymers.com](http://www.spolymers.com)**

**Tel: 661-294-1790**

**Fax: 661-294-0640**

**[info@spolymers.com](mailto:info@spolymers.com)**