



WE'RE HERE TO HELP

These instructions are intended as general guidelines for trial applications. Achieving optimal crosslinking results will require some fine-tuning and adjustment to account for factors like material substrate(s), preferred solvent, cleaning and application methods, environmental conditions, etc.

For best results, we encourage you to consult with our team before getting started. Our knowledgeable experts are available to answer your questions and provide advice specific to your unique applications. Our success is made possible through your success.

If you have questions, concerns, or feedback, contact your XLYNX representative, or send us a message at:

info@xlynxmaterials.com.

For more information, updates, and video demonstrations, visit us at:

www.xlynxmaterials.com



BONDLYNX BXW-202 **INSTRUCTIONS FOR TRIAL USE**

IMPORTANT:

- BondLynx (neat, unmixed) is a white crystalline solid at room temperature. If there are concerns about the state of your sample, contact XLYNX Materials before proceeding.
- BondLynx is activated by heat and UV light:
 - BondLynx (neat, unmixed) should always be stored in the freezer.
 - Prepared solutions (BondLynx mixed with solvent) can be refrigerated when not in use.
 - Avoid exposure to sunlight and temperatures above 40°C (100°F).
- BondLynx is applied as a thin, even coating. **More is not better;** Excessive application weakens the effectiveness of bonds.

WHAT YOU'LL NEED:

Depending on your application, the following will be required:

- Solvent (ethyl acetate, PGMEA, toluene, diethyl ether, or acetone recommended).
- Vial or container for mixing BondLynx with the solvent.
- Liquid dispenser (pipette, dropper, brush, etc.).
- UV curing chamber, handheld UV curing device or curing oven.
- Standard personal protective equipment for safe handling of chemicals (e.g., gloves, masks, eyewear).

1. PREPARE BONDLYNX SOLUTION

Prior to use, BondLynx must be mixed with the solvent of your choice so that only a thin layer of solution is applied to your material:

- The ratio of BondLynx to solvent will vary according to substrate and use. For reference: 3 gsm of BondLynx is generally sufficient coverage.
- Mix thoroughly until BondLynx has completely dissolved.
- Refrigerate and/or limit exposure to light until ready to use.

2. APPLY BONDLYNX SOLUTION

- For best results, ensure that the surfaces of the materials to be treated are as smooth as possible (no raised edges, surface defects) and have been cleaned of any dust or residue. Precleaning with ethyl acetate is recommended (alternative: use isopropanol or ethanol 70% solutions).
- Your BondLynx solution can be applied using a variety of methods. For trial purposes, XLYNX recommends using either a dropper, pipette, or infusion bath, as follows:

Method	Application
Dropper / Pipette (For Precision Applications)	<ul style="list-style-type: none">Apply solution in a thin, uniform layer.You may need to use a small brush or the tip of your pipette to spread the solution evenly across the bonding area.When using BondLynx as a single-agent adhesive, treatment of only one of the two surfaces being bonded is generally required.
Infusion Soaking (For Textile Applications)	<ul style="list-style-type: none">Place textile in a close-fitting tray or pan.Add enough BondLynx solution to completely soak the textile material.Cover and allow to soak for 20-30 minutes.Drain excess BondLynx solution.

3. EVAPORATE SOLUTION

- Regardless of how BondLynx solution has been applied, the solvent must be **evaporated completely** before proceeding to prevent BondLynx from crosslinking with the solvent during the curing stage.
- Allow sufficient time for your solvent to evaporate from the substrate.
- A freeze dryer or ventilated fume hood can be used to accelerate the evaporation process. Do not apply heat to evaporate the solvent, as even modest heat can initiate crosslinking reactions.

4. ACTIVATE BONDLYNX

- Your treated material is now ready for activation (or curing), which will result in molecular crosslink reactions across the treated area. This is also the stage where your treated material may be bonded to another untreated material.
- BondLynx BXW-202 can be activated by either UV light or moderate heat, depending on the material being bonded and/or the desired curing method.
- NOTE:** When BondLynx is used as a single-agent adhesive, the materials being bonded must be clamped or secured tightly together prior to curing to avoid gaps.

OPTION #1: PHOTOCURING (ULTRAVIOLET LIGHT)

- BondLynx BXW-202 can be photocured using 365nm wavelength UV / visible light. For reference:

Wavelength	Intensity*	Duration**
365 nm	80 mW/cm ²	70 sec

* Measured in a UV curing chamber at approx. 7.5" for 365nm light.

** Duration may depend on the intensity of UV light and the UV transmittance of materials used in certain applications. Use table as a guideline or consult with your XLYNX representative for advice.

OPTION #2: THERMAL CURING (OVEN HEAT)

- Optimal thermal curing of BondLynx BXW-202 takes place at a temperature of **110°C (230°F)** over a duration of 90 minutes.
- BondLynx BXW-202 can be cured at a wider range of temperatures from **90°C to 180°C (195°F to 355°F)**. As this will affect curing duration, consult with your XLYNX representative, or contact info@xlynxmaterials.com for advice.

5. LONG-TERM STORAGE & STABILITY

- BondLynx (neat) will remain stable for at least 4 years when stored in a cold, dark location (-20°C / -4°F). **For optimum stability, always store BondLynx in a freezer.**
- Mixed solutions will remain stable for up to 6 months when stored in a cool, dark refrigerated location.
- Avoid prolonged exposure to UV-light or room temperature conditions. Doing so can significantly impact BondLynx stability and performance.