



# Technical Data Sheet

## BondLynx BXW-202

Fluorine-Free Crosslinker, Adhesive & Functionalizing Agent

### Product Description

**BondLynx BXW-202** is a bis-diazirine crosslinker that forms strong carbon-carbon bonds between polymer chains, including those of low-surface-energy polymers like polyethylene, polypropylene, and non-functionalized cyclic olefin copolymers (COPs). BXW-202 is a multipurpose product designed to enable thermal curing and photopatterning of aliphatic resins (including intrinsically low-loss resins for use in microelectronics), to bond adhesion-resistant polymers, to enhance material strength, to prevent degradation through molecular stabilization, and to add functionality by making surfaces receptive to coatings, dyes, and other adhesives.

### Physical Properties

Appearance	Melting Point	Solubility	Reactivity
White solid, odorless	69°C	Wide range of organic solvents, including PGMEA, ethyl acetate, acetone, toluene, ethers, cyrene.	Crosslinks via carbene insertion into aliphatic C-H, N-H, O-H bonds

### Application Technique

BXW-202 is generally mixed with solvent or liquid resin to form a solution before use. For topical applications, best results are attained when applied to a smooth, clean, and dry surface. Allow any solvent to evaporate completely prior to activation. For reference, 3.0 gsm of BondLynx is generally sufficient coverage when used as an adherent and primer (ASTM D3163).

### Activation

#### Thermal Curing

Between 90°C – 180°C (195°F – 355°F)

#### Photo Curing

Long-wave ultraviolet (UV) irradiation  
(optimal curing conditions: 365nm at 80mW/cm<sup>2</sup>)

### Compatible Substrates

Any polymer comprising aliphatic C-H bonds, or any polymer comprising O-H or N-H bonds.

### Uses

- Resin curing agent
- Polymer crosslinker, adhesive, or primer
- Interfacial adhesive for composites
- Microelectronics and semiconductor manufacturing
- Perovskite, organic electronic & quantum dot stabilization
- Polymer textile strengthener

### Storage

For best results, store neat (unmixed) in a freezer at or below -20°C (-4°F). Avoid exposure to heat and UV light.

### Shelf Life


When freezer-stored, BondLynx BXW-202 is expected to remain stable for 4+ years. When the product is stored at room temperature (20°C / 68°F), optimal adhesion performance lasts for up to 3 months; however, haziness may appear in the solution due to diazo isomer formation after 24h at room temperature.

### Environmental / Health

Non-hazardous, non-toxic, PFAS-free.

### Disclaimer

All technical data contained herein are accurate as of the date of issuance, and are subject to change without prior notice. Given that many factors beyond the control of XLYNX Materials can affect the use and performance of XLYNX products in a particular application, the user is solely responsible for



---

evaluating the product and determining whether it is fit for a particular purpose and suitable for the user's method of application.