



Preliminary Technical Data Sheet

BondLynx BXW-202

Bis-Diazirine Crosslinking Adhesive, Stabilizer & Functionalizing Agent

Product Description

BondLynx BXW-202 is a small-molecule bis-diazirine crosslinker that forms strong carbon-carbon bonds across and between polymer chains, including low surface energy polymers like polyethylene and polypropylene. BondLynx BXW-202 is a multipurpose product designed to bond adhesion-resistant polymers, enhance material strength, prevent degradation through molecular stabilization, and add functionality by making surfaces receptive to coatings, dyes, and other adhesives.

Physical Properties

Appearance

White solid, odorless

Melting Point

69°C

Solubility

Wide range of organic solvents, including ethyl acetate, PGMEA, ethers, acetone, toluene, and isopropanol

Reactivity

Crosslinks via carbene insertion into aliphatic C-H, N-H, O-H bonds

Application Technique

BondLynx BXW-202 must be mixed with solvent to form a solution before use. Best results are attained when applied to a smooth, clean, and dry surface. Topically apply it as a thin layer and allow the solvent to evaporate completely before 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) At 110°C (230°F) it cures in 90 minutes.

Photo Curing

Long-wave ultraviolet (UV) irradiation (365nm, optimally). At 80mW/cm², it cures in 70 seconds.

Compatible Substrates

Any commodity polymer (except certain fluoropolymers), regardless of surface energy.

Uses

- Polymer crosslinker and adhesive
- 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 performance lasts for up to 3 months.

Environmental / Health

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

Disclaimer

To the best of our knowledge, all technical data contained herein is true and accurate as of the date of issuance and 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.