



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, hexane, diethyl ether, acetone, 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 as a thin layer and allow solvent to evaporate completely before activation. For reference, 5 mg per in² (or 1.5 mg per cm²) of BondLynx is generally sufficient coverage (ASTM 3163).

Activation

Thermal Curing

Between 90°C - 180°C (195°F - 355°F), with optimal activation at 110°C (230°F)

Photo Curing

Long-wave ultraviolet (UV) irradiation (365nm, optimally)

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. For best performance, solutions should be refrigerated and used within 1-2 months of preparation.

Environmental / Health

Non-hazardous, non-toxic, fluorine / per-and polyfluoroalkyl substance (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.