



# Preliminary Technical Data Sheet

## PlastiLynx PXN-2006

### Multifunctional Universal Primer

#### Product Description

PlastiLynx PXN is a fluorine-free, diazirine-grafted polyamine crosslinker that is designed as a universal surface-activating primer for hard-to-bond, low surface energy polymers. PlastiLynx treatments form a permanent, non-damaging layer of covalent bonds along a substrate surface, which, once cured by heat or UV-light, is made receptive to all manner of adhesives, dyes, and coatings. Used in combination with commercially available adhesives (cyanoacrylates, polyurethanes, epoxies, etc.), PlastiLynx PXN enables superior adhesion and new functionality.

#### Physical Properties

##### Appearance

Pale yellow viscous liquid at room temperature, odorless

##### Solubility

Wide range of organic solvents, including ethanol, methanol, water, and other polar protic solvents

##### Reactivity

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

#### Application Technique

PlastiLynx PXN 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 solvent to evaporate completely before activation. For reference, 0.8 gsm of PlastiLynx is sufficient coverage in priming applications. These values were verified with ASTM D3163 on HDPE and PP.

#### Activation

##### Thermal Curing

Between 110°C-120°C (230°F- 250°F), for 90 minutes.

##### Photo Curing

Long-wave ultraviolet (UV) irradiation (365nm). UV dosage: 0.16 J/cm<sup>2</sup>. Duration varies by UV intensity. For reference: 80 mW/cm<sup>2</sup> for 2 seconds

#### Compatible Substrates

Any commodity polymer (except certain fluoropolymers), regardless of surface energy. Optimally designed to work with polyethylene and polypropylene.

#### Uses

- Surface-activating adhesive primer or sizing agent for unreactive polymer substrates (films, solids, and fibers)
- Transform surface properties of hard-to-bond polymers, making them highly receptive to commodity adhesives, coatings, or dyes
- Interfacial adhesive for composites

#### Storage

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

#### Shelf Life

When freezer-stored, PlastiLynx PXN is expected to remain stable for 4+ years.

#### Environmental / Health

Non-hazardous, non-toxic, and 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.