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The following is a news release from Master Bond Inc. You have received it because you are listed as an editor for your publication.

Attached to this email is a low resolution version of the photograph that is included in the press kit for this product.

A high resolution version of this image and files with the body text of this release in Word, HTML and text formats are available at <https://www.masterbond.com/tds/led422dc90>.

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**FOR IMMEDIATE RELEASE**

**Nanosilica Filled, Dual Curable Adhesive Offers Rapid Fixturing with LED Light**

Master Bond LED422DC90 is a one component, nanosilica filled dual cure adhesive system engineered for high-speed fixturing and bonding of opaque substrates. This unique "side-bonding" capability allows for rapid polymerization up to 3-4 mm in depth by exposing the adhesive to 405 nm LED light from an angle. The cure is then completed by a secondary heat cure at 90-95°C for 30-45 minutes. This two-tiered curing process allows for the precise and rapid fixturing of heat-sensitive components.

LED422DC90 provides good dimensional stability and a relatively low coefficient of thermal expansion for a dual-cure LED product, at 30-40 x 10⁻⁶ in/in/°C. It is an optically clear material with a refractive index of 1.49, a Shore D hardness of 85-90, and an elongation of 1-3%. The system possesses a good strength profile, featuring a tensile strength of 6,000-7,000 psi, a tensile modulus of 475,000-575,000 psi, and a tensile lap shear strength for aluminum to aluminum of 800-900 psi.

The system is a reliable electrical insulator with a volume resistivity greater than 10¹⁴ ohm-cm. It passes NASA low outgassing certifications and is designed for use in the electronics, optics, and aerospace industries. LED422DC90 bonds well to a variety of substrates, including plastics, glass, and metals, and is serviceable from -80°F to +350°F. This adhesive is available in EFD® syringes, ½ pint, pint, and quart containers.

**Master Bond LED Curing Adhesives**

Optically clear, Master Bond LED light curable adhesives offer consistent long-term durability and reliability. They feature high bond strength, thermal stability, chemical and water resistance and excellent surface cure. They adhere to a wide variety of substrates, including tinted and UV- blocked materials. Read more about Master Bond’s LED curable adhesives at <https://www.masterbond.com/products/led-light-curable-adhesives> or contact technical support to discuss your application.

TECH SUPPORT

Email: [technical@masterbond.com](mailto:technical@masterbond.com)

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Note to Editors:

For a full product description, please visit <https://www.masterbond.com/tds/led422dc90>.

Check out new videos on our YouTube channel: <https://www.youtube.com/user/MasterBondVideo>

You can embed any of our videos on your website.

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