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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/led415dc90med>.

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## FOR IMMEDIATE RELEASE

**Medical Grade, Dual Curable Adhesive Offers Rapid Fixturing with LED Light**

Master Bond LED415DC90Med is a one component, dual cure adhesive system designed for high-speed manufacturing of medical electronic devices. It cures rapidly without oxygen inhibition upon exposure to 405 nm LED light, followed by a short 30-45 minute heat cure at 90-95°C, making it well-suited for bonding heat sensitive components. LED415DC90Med passes ISO 10993-5 requirements for non-cytotoxicity and resists common medical sterilants, including glutaraldehyde, peracetic acid, ethylene oxide, and gamma radiation.

Unlike conventional dual cure adhesives that limit light penetration to approximately 1 mm, LED415DC90Med can partially cure or fixture sections up to 6 mm deep when exposed to 405 nm LED light at the appropriate intensity and for a sufficient duration. This deeper cure capability enables the fixturing of opaque components by allowing light penetration through the adhesive from the sides. A subsequent cure at 90-100°C for 30-60 minutes is recommended to optimize strength and overall performance.

LED415DC90Med has a thixotropic index of 5.53 at room temperature. It exhibits a tensile strength of 5,500-6,500 psi, a tensile modulus of 450,000-550,000 psi, and a lap shear strength exceeding 1,000 psi (aluminum to aluminum). This rigid system cures to a Shore D hardness of 85-90 with an elongation of 1-3% at 75°F. It is serviceable from -80°F to +350°F, electrically non-conductive (volume resistivity > 10¹⁴ ohm-cm), and bonds well to a variety of substrates, including plastics, glass, and metals. LED415DC90Med is available in syringes, ½ pint, pint, and quart containers.

**Master Bond Medical Grade Adhesives**

Master Bond's medical-grade systems are specifically formulated to comply with USP Class VI and/or ISO 10993-5 standards. Formulations include epoxy, silicone, UV- or LED-curable, epoxy-polyurethane blend, and cyanoacrylate chemistries. Read more about Master Bond’s biocompatible adhesives at <https://www.masterbond.com/properties/biocompatible-adhesives> or contact technical support to discuss your application.

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Note to Editors:

For a full product description, please visit <https://www.masterbond.com/tds/led415dc90med>.

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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