Electrolube Launch Next Generation UV Cure Coatings at SMTConnect

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Seven next generation UV cure conformal coating products will be launched for the first time in Europe at the SMTConnect show In Nuremberg, hosted at the Nurnberg Messe from 07-09 May 2019. Electrolube, the global manufacturer of electro-chemicals, developed the exciting new UVCL range to meet the various requirements of electronics, LED and automotive manufacturers, with the additional benefit of rapidly increasing production time and offering even higher levels of performance. The new UV Cure range will be showcased in Hall 4, stand 339, where Electrolube's senior technical team will be available to discuss the advantages and specifications of the new UV cure coating range.

The UVCL range is solvent-free, VOC-free and provides unsurpassed performance in harsh environments, including resistance to cracking during thermal shock cycling. The main benefit of Electrolube's UV Cure coatings is that boards can be handled immediately, with full cure guaranteed within 6-12 hours due to the chemical secondary cure mechanism. In comparison to existing UV cure systems on the market, the majority require minimum moisture secondary cure times of 8-14+ days, whereas the new UVCL range facilitates tremendous reductions in the amount of Work In Progress.

The range features <u>UVCL</u>, a single component, medium-low viscosity dual cure coating with secondary moisture cure, for complete cure in shadow areas. Available in 5L packaging, UVCL is VOC-free, non-flammable and demonstrates excellent electrical properties. The coating provides a wide operating temperature range and is ready to use for selective spray application.

<u>UVCLP</u> is the Plus version of UVCL. It is a transparent, flexible coating which is extremely resistant to thermal shock. The main benefits of <u>UVCLP</u> are the improved coverage and protection achieved, along with a guaranteed chemical cure in 6 hours thanks to its unique secondary cure mechanism. Selectively applied at 50-150 microns thickness, the plus version will always afford a higher level of condensation protection than UVCL when sprayed at the same thickness. <u>UVCLP</u> has a higher maximum operating temperature of 150°C and meets the requirements of UL94V-0 at thicknesses below 150 microns and can be cured with either 365nm LED lamps or 'D' bulb microwave technology.

Electrolube have also developed an 'xtra' version of UVCL, called <u>UVCLX</u>, which shares the benefits of <u>UVCLP</u>with excellent resistance to thermal shock, immediate board handling with a guaranteed chemical cure in 6 hours thanks to the unique secondary chemical cure mechanism and exceptional coverage and protection. Reflecting its environmental credentials as well as

increasing the ease of inspection, <u>UVCLX</u> is a green-opaque coating that can be applied at up to 300 microns and has a higher maximum operating temperature of 150°C. It is a highly flexible coating that demonstrates excellent thermal conductivity 0.7 Wm⁻¹K⁻¹ for significantly improved heat dissipation. The coating is also UL746 qualified and meets the requirements of UL94V-0 at thicknesses below 300 microns.

Further UV Cure coating products will be launched at the show and include a brand new film coating product, UVCL-FC, which enables the application of even thinner coatings and faster curing line speeds. UVCL-FC is a low viscosity, fast-curing UV formulation for rapid processing. The company will also showcase a new UV cure coating specifically for LED applications. The UVCL-LED coating is also a low viscosity coating that enables rapid cure with low energy 365nm LED lamps.

UVCL-HV is a high viscosity UV curable material, designed to provide better coverage of component leads and exposed metal surfaces during dispensing applications and Electrolube's UVCL-Gel is a no-flow gel version of UVCL, designed for sealing connectors and other areas that must not be coated.

Ron Jakeman, Managing Director of Electrolube, comments, "The new UV cure coating range is an unbeatable range of conformal coating materials and we are very excited about launching the new range to the European market."