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Henkel's Loctite Multicore HF 212 offers superb print performance in an environmentally sustainable formulation

## Henkel Develops High-Performance Halogen-Free Solder Paste

The Electronics Group of Henkel continues to expand its halogen-free materials portfolio with the launch of Loctite Multicore HF 212, a halogen-free, lead-free solder paste ideal for today's high-value PCB assemblies.

Like Henkel's other halogen-free formulations, Loctite Multicore HF 212 contains zero deliberately added halogen and is under the limit of detection for chlorine and bromine when subjected to rigorous testing. With consistent print performance and minimal hot slump – even in regions with temperatures that exceed 86°F (30°C) and relative humidity (RH) as high as 80 percent – Loctite Multicore HF 212 offers exceptional stability and environmental adaptability. The material exhibits extremely low voiding in CSP via-in-pad joints, good coalescence and excellent solderability over a wide range of surface finishes including Ni/Au, Immersion Sn, CuNiZn, Immersion Ag and OSP copper.

"While Loctite Multicore HF 212 was obviously designed for sustainability," explains Henkel Solder Materials Global Product Manager, Mark Currie, "our approach was much more holistic. Customers want a single solder paste that delivers excellent performance – period. With Loctite Multicore HF 212 – and all of our solder pastes for that matter – we ensure the formulation meets demanding soldering requirements in tandem with environmental benefits."

## LED Lighting Customer Praises Long Stencil Life

Since its introduction in late 2012, Loctite Multicore HF 212 has been steadily enabling more robust printing processes at manufacturers around the globe. For US vehicle safety lighting manufacturer, Missouri-based Peterson Manufacturing, Loctite Multicore HF 212 delivers on numerous fronts, not the least of which is cost savings.



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"We decided to evaluate Loctite Multicore HF 212 because we were having some printing challenges with our previous paste," explains Ken Horky, Electronics Manufacturing Process Engineer at Peterson Manufacturing, where the new solder paste is being used for all of the company's LED lighting products. "The printing results with Henkel's new paste are excellent, and one of the biggest benefits for our operation is the material's very long stencil life. In an environment where cost control is essential, the ability to leave the paste on the stencil for very long periods of time – even until the next shift – with no degradation in quality is a huge advantage. We don't discard nearly as much paste as before, which is a tremendous cost savings."

In addition to the printability and long stencil life, Horky also notes Loctite Multicore HF 212's very low residues. "This material also has great aesthetics," he says. "There is very little paste residue, which is really important to customers."

Loctite Multicore HF 212 is optimized for use on components with pitches of 0.3mm and greater and is an ideal material for larger, high-value boards often used in industrial, networking and lighting applications. What's more, the novel solder paste has been proven to deliver excellent wetting results on parts such as CuNiZn shields that can be particularly problematic for alternative paste materials. This alloy is commonly used in RF shielding applications.

For more information, visit our website www.henkel.com/electronics.

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## Photo material is available at http://www.henkel.com/press

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The following material is available:



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