

## New Product: Welco® LED131 Lead-Free No-Clean Solder Paste

Welco® LED131 SAC solder paste series is a lead-free no-clean solder paste that promotes outstanding wetting and minimizes soldering defects. The LED131 flux system is optimized explicitly for lead-free alloys, such as Sn/Ag/Cu. This formula provides superior performance on a variety of surface finishes and leaves behind a clear residue.

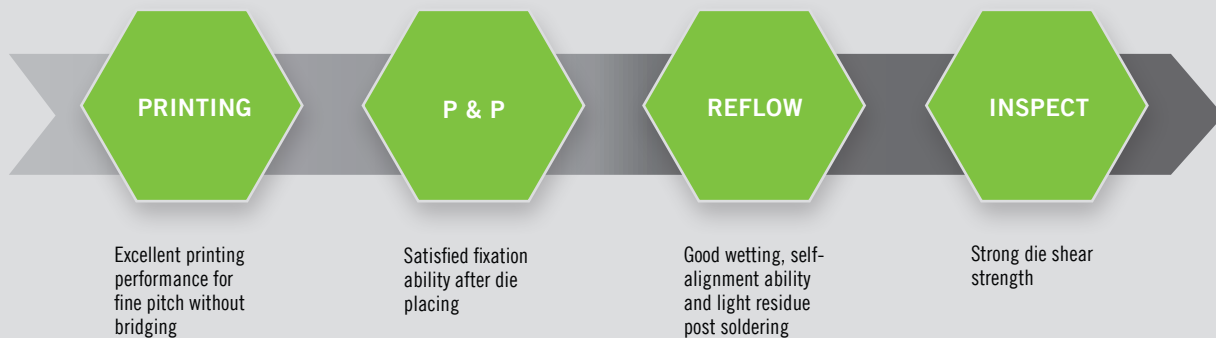
The unique superfine powder technology excels in printing and soldering performance in mini-LED pads. Perfectly suited for the LED flip-chip package of mini-LED display, lighting, and automotive.

### Welco® LED131 benefits

- Wide processing window, suitable for traditional die attach and die mass transfer application
- Excellent printing performance for ultrafine pitch and long work life
- Good shear strength for solder joint and high reliability
- Superior wetting performance on fine pitch and self-align in reflow process
- Light residue - perfect for optical application
- Low void



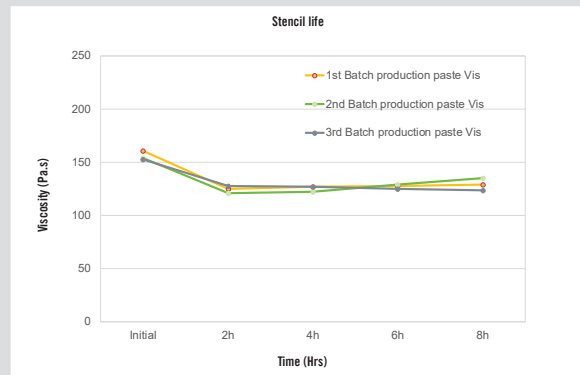
### Process and Application



## Product Properties Table

Physical Properties	LED131
Alloy	SAC305
Metal Content	84%
Halogen Content	Halogen free
Flux Activity	ROLO
Application	
Printing	Yes
Features & Benefits	
Cleaning	Solvent Clean
Storage Condition	2 – 10°C

## Stencil Life Test Comparison



## Performance Comparison



**Heraeus Electronics**  
 Heraeus Deutschland GmbH & Co. KG  
 Heraeusstraße 12-14  
 63450 Hanau, Germany  
[www.heraeus-electronics.com](http://www.heraeus-electronics.com)

**Americas**  
 Phone +1 610 825 6050  
[electronics.americas@heraeus.com](mailto:electronics.americas@heraeus.com)

**China**  
 Phone +86 21 3357 5164  
[electronics.china@heraeus.com](mailto:electronics.china@heraeus.com)

**Asia Pacific**  
 Phone +65 6571 7649  
[electronics.apac@heraeus.com](mailto:electronics.apac@heraeus.com)

**Europe, Middle East and Africa**  
 Phone +49 6181 35 3627  
[electronics.emea@heraeus.com](mailto:electronics.emea@heraeus.com)

The descriptions and engineering data shown here have been compiled by Heraeus using commonly-accepted procedures, in conjunction with modern testing equipment, and have been compiled as according to the latest factual knowledge in our possession. The information was up-to date on the date this document was printed (latest versions can always be supplied upon request). Although the data is considered accurate, we cannot guarantee accuracy, the results obtained from its use, or any patent infringement resulting from its use (unless this is contractually and explicitly agreed in writing, in advance). The data is supplied on the condition that the user shall conduct tests to determine materials suitability for particular application. The Heraeus logo, Heraeus, Welco® and the Welco figurative mark are trademarks or registered trademarks of Heraeus Holding GmbH or its affiliates. All rights reserved.