

New Product: Welco™ AP519 T6 Low Temperature No-Clean Printing Paste

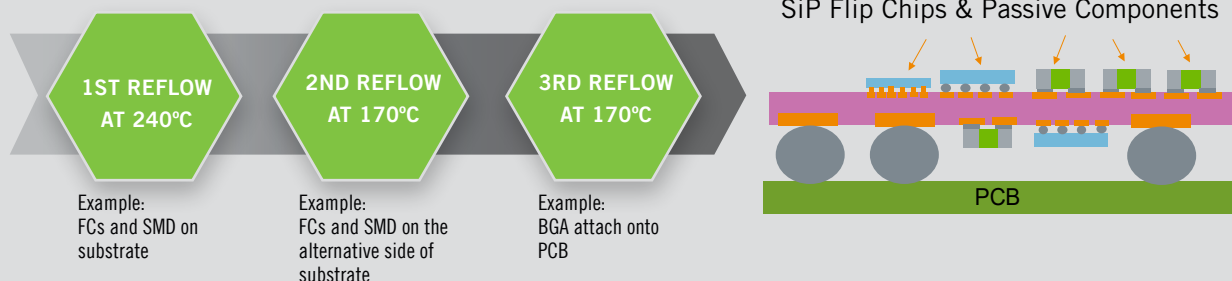
Welco™ AP519 T6 solder paste is a low-temperature, state-of-the-art no-clean, lead-free solder paste formulated with Heraeus proprietary Welco™ powders. It is specifically designed for processes that require a low peak reflow temperature of $\leq 170^{\circ}\text{C}$, including BGA, SMD component or flip-chip attach processes for fine pitch semiconductor packages such as System-in-Package (SiP), Package-on-Package (PoP) etc.

Welco® AP519 Benefits

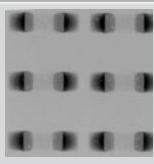
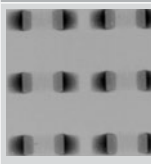
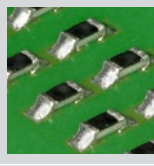
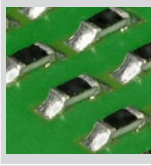
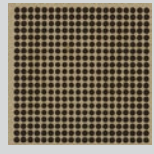
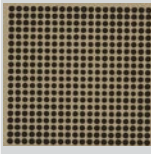
- Uses high-quality Welco™ Type 6 powders
 - Narrow size distribution
 - Uniform spherical shapes
 - Batch-to-batch consistency
- Low peak reflow temperature at 170°C
- Best-in-class low-void performance
- Excellent fine pitch paste release
- Long stencil life ($\geq 8\text{hr}$) & long staging life ($\geq 8\text{hr}$)
- Colorless flux residue after reflow



Process and Application



Stencil Life Test

8 hours continuous printing	0 hr	8 hr
Low void performance (< 10%) 01005 component attach & reflow x-ray inspection		
No bridging or tombstoning 01005 component attach & reflow optical inspection		
Consistent fine pitch paste release 100um stencil Opening 50um line spacing Cu OSP substrate		

Product Properties Table

Physical Properties	AP519
Alloy	Sn42/Bi57/Ag1
Powder Type	Welco™ Type 6
Halogen Content	Halogen free
Flux Classification	No-Clean / Solvent Clean
Particle Size	5 - 15 µm
Melting Point	138 - 142 °C
Applications	Printing

The data given here is valid. We reserve the right to make technical alterations.

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