



Multicore HF108

Henkel's Multicore HF108 is a halogen-free, no-clean, lead-free solder paste, which has a broad process window for printing, reflow, humidity resistance and shows minimal hot slump.





HF108 solder paste has been formulated to give low voiding in CSP via-in-pad joints and excellent solderability over a wide range of reflow profiles in air and nitrogen, and across a wide range of surface finishes including Nickel/Gold, Immersion Tin, Immersion Silver and OSP Copper.

Product Attribute Process Benefit

Halogen-free	HF108 solder paste meets all the current "definitions" of halogen-free <ul style="list-style-type: none"> no added halogen measured <900 ppm Chlorine and Bromine and <1,500 ppm total by Oxygen (O₂) bomb test reflow in air and/or nitrogen
Halide-free	Flux classification ROL0 in accordance to J-STD-004
Printing excellence	SAC alloys, with type 3 and type 4 powders <ul style="list-style-type: none"> suitable for high speed printing demands low hot slump, reduced bridging for fine pitch printing demands (IPC 21A – 0.15 mm)
Colorless and pin-testable residues	Improves speed and ease of post-reflow inspection
Low voiding	New chemistries allow pursuit of low void levels (<5%). Low void levels reduce risk of decreased solder joint reliability.

HF108 solder paste has a high tack force to resist component movement during high speed placement. It offers long printer abandon times and excellent resistance to high temperatures and relative humidity.

Halide-Free

Halogen-Free

Drivers for Classification	High reliability solder interconnects International standards	REACH Non-government organizations (NGOs)			
Definition	No flux corrosivity or dendritic growth detection Specific requirements to give ROL0 classification	No intentional halogens added to flux Comply to international standards (see below)			
Test Procedures	Well-established Chloride and Bromide halide test measured by titration	NEW – O ₂ bomb on flux Ion chromatography on flux			
International Standards	IPC J-STD-004B, IPC-TM-650	Copper Mirror	no penetration	JPCA-ES-01-1999	Bromine <900 ppm Chlorine <900 ppm
		Silver Chromate	no discoloration		
		Fluoride test	no color change		
		Chloride and Bromide	<0.005%	IEC 61249-2-21	Bromine 900 ppm max. Chlorine 900 ppm max. 1,500 ppm max. (total halogens)
		Flux corrosion	no pitting no color change		
SIR	no discoloration no dendritic growth no corrosion >10 ⁸ Ω	IPC-401B	Bromine 900 ppm max. Chlorine 900 ppm max. 1,500 ppm max. (total halogens)		

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