

Kester® NF1060-VF & Kester® 979

No-Clean, VOC-Free, Wave Soldering Fluxes

Best VOC-Free Wave Soldering Fluxes

Kester NF1060-VF and Kester 979 are MacDermid Alpha Electronic Solutions' leading VOC-free, halide-free, rosin/resin free, no-clean wave soldering fluxes. Several proprietary additives are formulated into the chemistry which act to reduce the surface tension between the solder mask and the solder. This formulation dramatically reduces the tendency of solderball generation and results in a very clear appearance with exceptional joint and board cosmetics.

Kester NF1060-VF and Kester 979 are low residue fluxes, providing excellent pin testability and minimizing equipment maintenance.

Key Features

- VOC-Free for lower VOC emissions
- Thermally stable activators provide low solder bridging
- No surface insulation degradation
- No offensive odor
- Chemically compatible with most solder masks & board laminates
- Low solids content prevents clogging or buildup around flux spray nozzles



LOW
MACHINE
RESIDUE



LOW
NOZZLE
CLOGGING

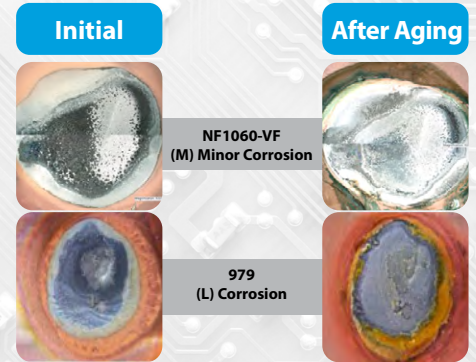


APPEARANCE



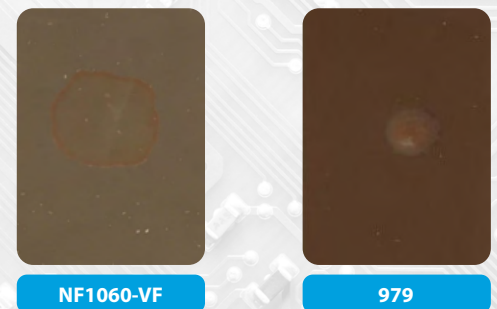
REGULATORY
COMPLIANCE

COPPER CORROSION TEST (IPC-TM-650 2.6.15)



- Initial and after 10 days of exposure to 40 °C and 93% RH
- No evidence of greenening or any change is observed for 979, classified under "L" category of corrosion as per J-STD-004B
- There was observation of minor corrosion without pitting of the copper for NF 1060-VF, classified under "M" category of corrosion as per J-STD-004B

COPPER MIRROR TEST (IPC-TM-650 2.3.32)



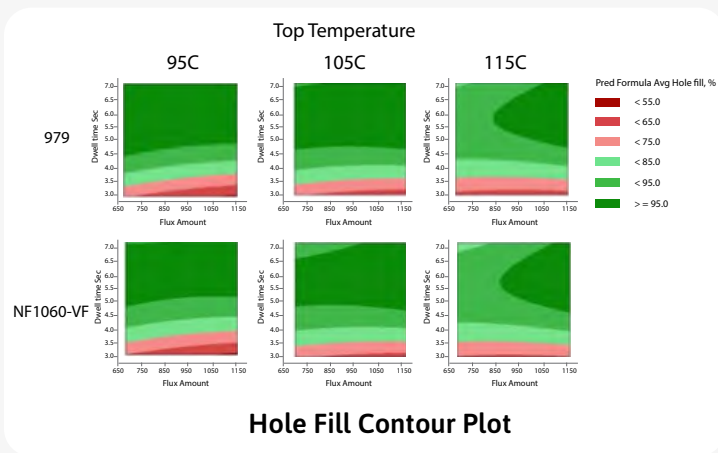
- No copper film was removed from the copper mirror
- "L" category corrosion per J-STD-004B



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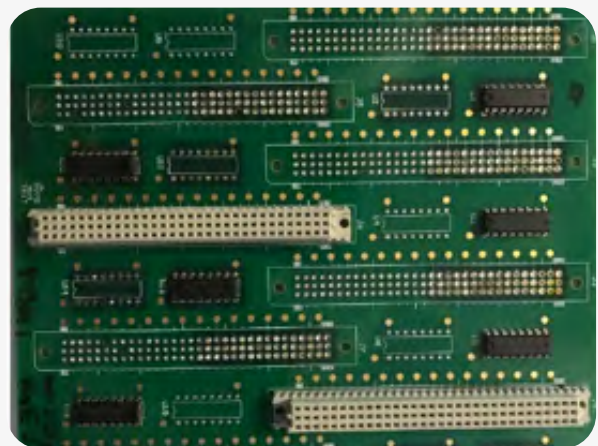
No-Clean, VOC-Free, Wave Soldering Fluxes

TECHNICAL DATA	KESTER NF1060-VF	KESTER 979	PROCESS CONTROL	KESTER NF1060-VF	KESTER 979
Solids Content, wt/wt	4.9 %	4.5%	Flux Application	Spray	Spray
Acid Number (mg KOH/gm)	41.7	40.0	Amount of Flux Applied	155-233 µg/cm ² of solids	120-240 µg/cm ² of solids
Specific Gravity @ 25 °C	1.014	1.020	Top-Side Preheat Temperature	110-115 °C	95-115 °C
IPC J-STD-004 Designation	ORM0 (004B)	ORL0 (004)	Bottom-Side Preheat Temperature	0 to +32 °C vs. Topside	
Halogen-Free	Yes	NO	Solder Pot	260-270 °C for SnCu or SAC alloy 245-260 °C for Sn63Pb37 alloy	
SIR, PC J-STD-004(B)	PASSED	PASSED	Contact Time	4-8 seconds	



Hole Fill Contour Plot

Kester 979 and NF1060-VF demonstrate outstanding hole-fill performance across different preheating temperatures and dwell time.



Test Vehicle: Multitek PCB
Alloy: SAC305
Solder Pot Temperature: 265 °C
PCB Thickness: 2.4mm
PCB Laminate: FR-4
Copper Layer: 4 layers, top and bottom 1 oz, two internal layers 2 oz
Component: Four IC (16-pin), Two connectors (96-pin, 3 rows)



macdermidalpha.com
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Kester is a product brand of MacDermid Alpha Electronics Solutions.

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