



**Multicore**

## MULTICORE WS300

Lead-Free Water Wash Solder Paste



**Henkel**

MULTICORE WS300 is a lead-free, high activity, water washable solder paste with superior cleaning characteristics, and is suitable for high speed, fine pitch printing applications. This unique material has a wide process window, long open and abandon times, and is highly resistant to humidity and slump. The high activity flux of MULTICORE WS300 solder paste allows for excellent wetting to a wide range of surface finishes, delivering robust performance and process flexibility to manufacturers worldwide.



## MULTICORE WS300

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### Features and Benefits

- Effective over a wide range of printer cycle times and print speeds
- Excellent printer open time and between print abandon time
- Long component tack time
- Excellent slump resistance
- Effective over a wide range of reflow profiles in air or Nitrogen
- Residues removed with deionized water rinse

VISCOSITY		
97SC - MULTICORE WS300 AGS 89		
Brookfield Viscosity/cP		490,000
Malcom Profile	TI 10s <sup>-1</sup>	0.58 990

TACK TIME	
97SC - MULTICORE WS300 AGS 89	
Tack-Time Profile Tack/gm <sup>-2</sup>	
0 hours	0.8
7 hours	0.8
16 hours	0.6
24 hours	0.5

> 24 hours tack time

### Testing Results

#### ANSI/J-STD-004 Testing

- Copper Mirror = H designation
- Halide Content = 1 designation
- Fluoride Testing = None Detected
- J-STD flux classification ORH1
- Passes SIR after cleaning (2 x 10<sup>9</sup> Ω resistance)

#### ANSI/J-STD-005 Testing

- Hot and Cold Slump – PASS
- Tack Time > 24 hours

#### Moisture Resistance

- No moisture uptake after six hours at 38°C/85%RH
- Pass J-STD-005 Slump after eight-hour exposure to 25°C/95%RH

#### Bellcore (after cleaning)

- Passes SIR 5.2 x 10<sup>10</sup> Ω
- Passes ECM 7.6 x 10<sup>8</sup> Ω

#### Cleanable up to three days after reflow

- Batch cleaning in deionized water
- No halides detected after cleaning with Ion Contamination Tester

### Printing Characteristics

- Suitable for fine pitch (16 mil), high speed printing applications with type 3 powder (AGS) & type 4 (DAP) powder
- Wide printing process window
- Good printer open time and tack-life
- Extended between-print abandon time
- With refrigeration, six-month stability

PRINTING FEATURES	
Features	Benefits
Wide Print Process Window • Print Speed = 1 in./sec. – 4 in./sec. • Print Pressure = 12 to 14 lbs.	Easy drop-in replacement
> 4-Hour Abandon Time	Less scrap and waste on production lines. More cost-effective product!



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