

Technical Bulletin



Solder plus Support

J8 No Clean Jetting Solder Paste

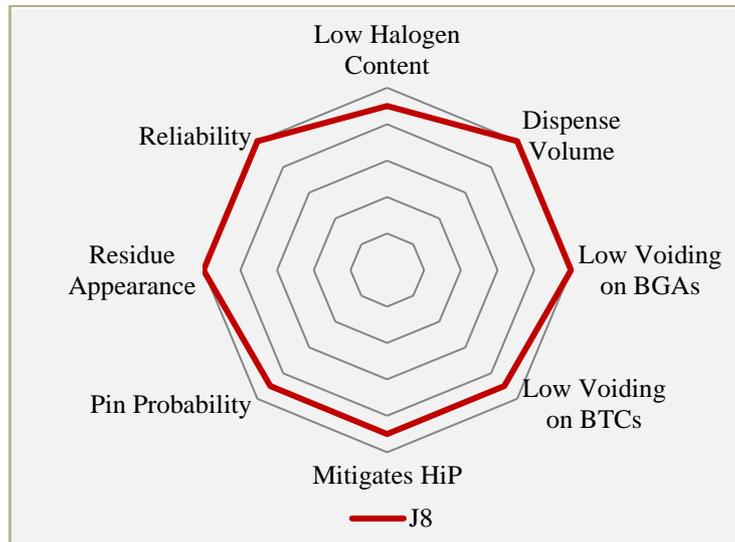
DESCRIPTION

AIM's J8 No Clean Jetting Solder Paste is specially formulated for use with jetting equipment providing consistent solder deposits as small as 200µm. J8 is fully compatible with all AIM no clean solder pastes for use in applications where combining jetted paste deposits with printed paste deposits is required. J8 has a novel activator system providing powerful, durable wetting action accommodating a wide range of profiling producing bright shiny joints without graping defects. J8 has reduced voiding to as low as <5% on BGA and <10% on BTC ground pads.

FEATURES AND BENEFITS

- Capable of 200µm deposits
- Low Voiding: <5% on BGA and <10% on BTC Components
- Eliminates HiP Defects
- REACH and RoHS* Compliant
- Powerful Wetting on Lead-Free Surface Finishes
- Passes Bono Testing
- Available in SAC305 and Sn63 Alloys

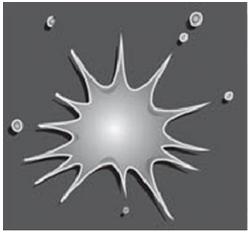
CHARACTERISTICS



STORAGE & SHELF LIFE

J8 is supplied in EFD Optimum 5cc Syringe Barrels. Barrels should be stored refrigerated, tip down and removed from refrigeration 4-6 hours prior to use. J8 should not be returned to refrigeration. After opening, solder paste shelf life is environment and application dependent. See AIM's paste handling guidelines for further information. Alloy and storage conditions may affect shelf life. Please refer to J8 Certificate of Analysis for product specific information.

Parameter	Time	Temperature
Sealed Refrigerated Shelf Life	6 Months	0°C-12°C (32°F-54°F)
Sealed Unrefrigerated Shelf Life	2 Days	< 25°C (< 77°F)



SOLDER CONNECTION

Email: sales@solderconnection.co.uk | Tel: +44(0)1291 624 400

CLEANING

Pump assembly should be cleaned per manufacturer's instructions.

Post-Reflow Flux Residue: J8 residues can remain on the assembly after reflow and do not require cleaning. Where cleaning is mandated, J8 residues can be effectively removed with common defluxing agents.

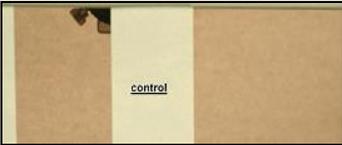
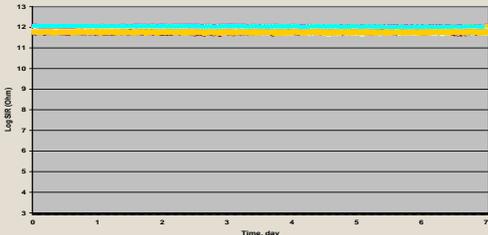
HEALTH & SAFETY

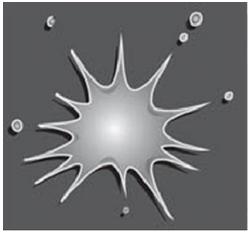
Use with adequate ventilation and proper personal protective equipment. Refer to the accompanying Safety Data Sheet for any specific emergency information. Do not dispose of any hazardous materials in non-approved containers.

REFLOW PROFILE

Detailed profile information may be found at <http://www.aimsolder.com/reflow-profile-supplements>.

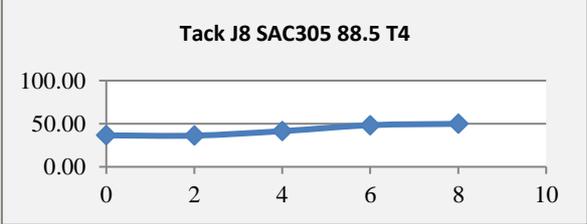
TEST DATA SUMMARY

Name	Test Method	Results	
IPC Flux Classification	J-STD-004	ROL0	
IPC Flux Classification	J-STD-004B 3.3.1	ROL1	
Name	Test Method	Typical Results	Image
Copper Mirror	J-STD-004B 3.4.1.1 IPC-TM-650 2.3.32	LOW	
Corrosion	J-STD-004B 3.4.1.2 IPC-TM-650 2.6.15	PASS	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Before</p>  </div> <div style="text-align: center;"> <p>After</p>  </div> </div>
Quantitative Halides	J-STD-004B 3.4.1.3 IPC-TM-650 2.3.28.1	Br: 0.24% Cl: 0.0% Typical	
Qualitative Halides, Silver Chromate	J-STD-004B 3.5.1.1 IPC-TM-650 2.3.33	PASS	
Qualitative Halides, Fluoride Spot	J-STD-004B 3.5.1.2 IPC-TM-650 2.3.35.1	No fluoride	
Surface Insulation Resistance	J-STD-004B 3.4.1.4 IPC-TM-650 2.6.3.7	All measurements on test patterns exceed 100 MΩ	



SOLDER CONNECTION

Email: sales@solderconnection.co.uk | Tel: +44(0)1291 624 400

Name	Test Method	Typical Results	Image												
Bono Testing		PASS Fc<8.0 Typical													
Oxygen Bomb Halogen Testing	EN14582:2007 SW 9056 SW 5050	Br 265 mg/Kg Cl <122 mg/Kg													
Electrochemical Migration	J-STD-004B 3.4.1.5 IPC-TM-650 2.6.14.1	PASS													
Flux Solids, Nonvolatile Determination	J-STD-004B 3.4.2.1 IPC-TM-650 2.3.34	94.77% Typical													
Acid Value Determination	J-STD-004B 3.4.2.2 IPC-TM-650 2.3.13	135.95 mgKOH/g flux Typical													
Viscosity	J-STD-004B 3.4.2.4 IPC-TM-650 2.4.34	200-500 Kcps													
Visual	J-STD-004B 3.4.2.5	PASS													
Slump	J-STD-005A 3.6 IPC-TM-650 2.4.35	PASS													
Solder Ball	J-STD-005A 3.7 IPC-TM-650 2.4.43	PASS	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>15 min</p>  </div> <div style="text-align: center;"> <p>4 hrs</p>  </div> </div>												
Tack	J-STD-005A 3.8 IPC-TM-650 2.4.44	36.1 gf Time 0 Typical	<div style="text-align: center;"> <p>Tack J8 SAC305 88.5 T4</p>  <table border="1"> <caption>Tack J8 SAC305 88.5 T4 Data</caption> <thead> <tr> <th>Time (min)</th> <th>Tack Strength (gf)</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>36.1</td> </tr> <tr> <td>2</td> <td>36.1</td> </tr> <tr> <td>4</td> <td>36.1</td> </tr> <tr> <td>6</td> <td>36.1</td> </tr> <tr> <td>8</td> <td>36.1</td> </tr> </tbody> </table> </div>	Time (min)	Tack Strength (gf)	0	36.1	2	36.1	4	36.1	6	36.1	8	36.1
Time (min)	Tack Strength (gf)														
0	36.1														
2	36.1														
4	36.1														
6	36.1														
8	36.1														

The information contained herein is based on data considered accurate and is offered at no charge. No warranty is expressed or implied regarding the accuracy of this data. Liability is expressly disclaimed for any loss or injury arising out of the use of this information or the use of the materials designated.