IN J9 SOLDER PASTE (T3 & T4)

- Specially designed for Excellent Wetting and Fluidity
- Excellent Printing Performance
- Suitable with Electronics Applications
- High-Quality Solder Joint & Superior Solderability
- Reduced Void
- Excellent Tack Time
- 8+ Hour Shelf Life while Printing

DESCRIPTION

PAI IN J9 is compatible to both lead-based & lead free, no-clean solder paste specifically formulated for Surface Mount Technology (SMT) applications. It provides excellent wetting and strong solder joint formation, even at the higher temperatures required for lead-free alloys. The rosin helps improve solder flow and reduces oxidation during the soldering process. After soldering, it leaves behind a stable, non-corrosive residue that is generally safe to leave on most assemblies. Provides superior wetting on various PCB surface finishes, ensuring strong and reliable solder joints. Produces solder joints with minimal voids, improving thermal and electrical reliability. Suitable for fine-pitch components and high-density assembly with excellent print definition and slump resistance.

HANDLING & STORAGE

Store solder pastes in a refrigerated environment, ideally between 0°C and 10°C (32°F to 50°F). Do not freeze the paste, as freezing can negatively impact the flux chemistry and paste performance. Maintain storage in a dry environment, preferably with relative humidity below 60%. Keep containers tightly sealed and stored upright to prevent oxidation, drying, or contamination. When removing paste from refrigeration, allow it to reach room temperature (approximately 30 minutes to 1 hour) before opening to avoid condensation-related issues. Under recommended storage conditions, most solder pastes have a shelf life of 6 months. Use a First-In, First-Out (FIFO) inventory system to ensure older batches are used before newer ones. Never return used solder paste to the original container.

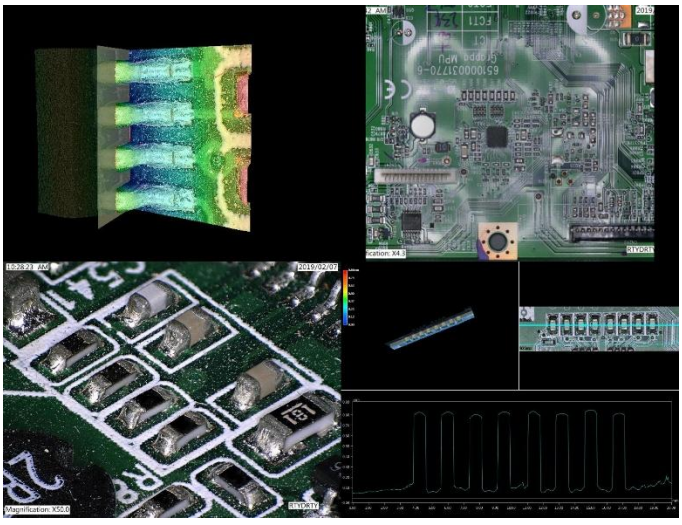
CATEGORY	DURATION	TEMPERATURE
Sealed Refrigerator Life	6 Months	0°C-10°C
Unsealed Used Life	36 Hours	<25°C

CLEANING

Perform a dry wipe every 5 to 10 boards. Perform a wet wipe using PAI-IPA or stencil cleaner every 15 to 25 boards. For fine-pitch components, increase the cleaning frequency as needed to maintain print accuracy. After completing a print job, remove all excess solder paste from the stencil using a spatula or scraper. Perform a thorough wet clean of the entire stencil using PAI-IPA (Thinner) or appropriate solvent. Visually inspect apertures for clogs or residue. Allow the stencil to fully dry before storing in a clean, dry environment.

PRINTING

PARAMETERS	SETTINGS
Printing Speed	20-100mm/sec
Squeegee Pressure	0.018-0.027kg/mm of blade length
Undersign Stencil Wipe	Once every 15-20 boards
Solder Paste Stencil Life	>12 hours, (20°C-25°C)



(*Be SURE that all languages are on the same rev #) Document Rev #NF17

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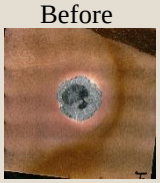
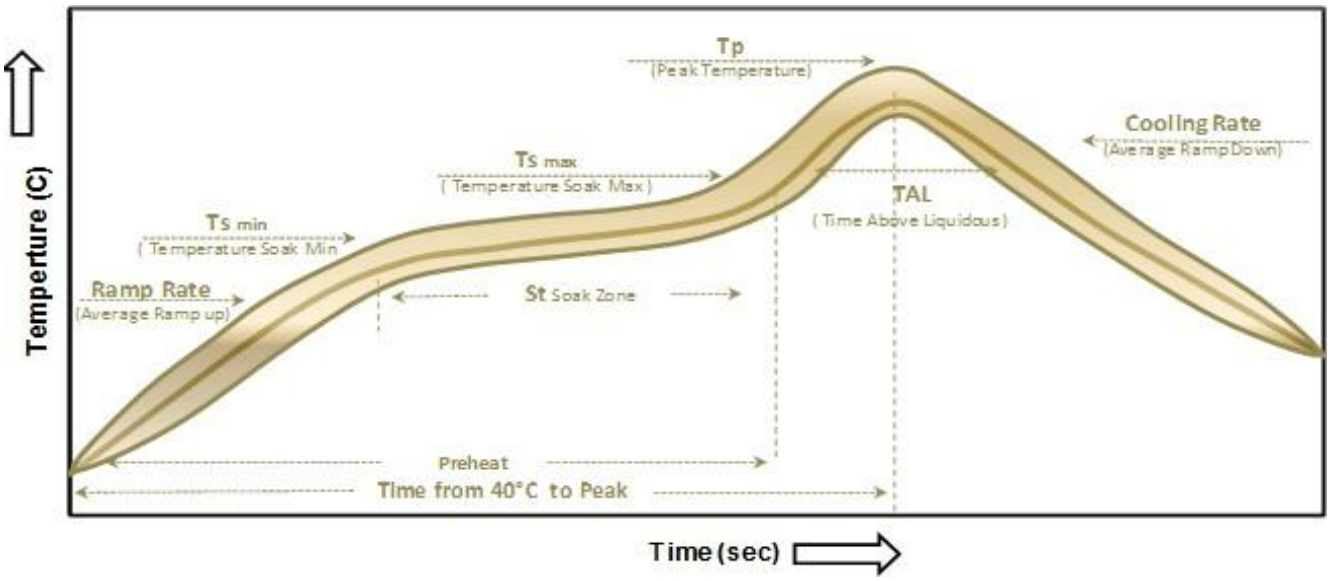
TEST DATA SUMMARY

NAME	TEST METHOD	RESULTS	
IPC Flux Classification	J-STD-004	ROL0	
NAME	**TEST METHOD**	**TYPICAL RESULTS**	**IMAGE**
Copper Mirror	JIS Z 3197	PASS	
Qualitative Halides, Silver Chromate	JIS Z 3197	PASS	
Quantitative Halides	IS 1921:2005	PASS	
Corrosion	JIS Z 3197	PASS	Before  After 
Qualitative Halides			
Surface Insulation Resistance (SIR)	JIS Z 3197	PASS	
Acid Value Determination	IS 1921:2005	15 mg KOH/ g	
Viscosity	JIS Z 3197	100-300 Pa.S	
Visual	JIS Z 3197	Gray, Smooth, Creamy	
Slump	JIS Z 3197	PASS	0.2 mm
Solder Ball	JIS Z 3197	Preferred	

TEMPERATURE PROFILE

Profile measurement should be performed on a fully populated assembly to ensure accuracy. It is recommended to record the reflow profile for each unique product or assembly part number at the beginning of a production run. While the same oven settings may be used across multiple assemblies, verification through profiling is essential for process control and quality assurance. Collected data should be analysed and documented as part of process traceability and continuous improvement efforts



OPERATION MANUAL

Apply 2/3 of a jar of solder paste onto the stencil at the start. Do not exceed one full jar at any time. Add solder paste gradually as needed during production to maintain consistency. To maintain quality, do not mix used solder paste with fresh paste. Start each day with fresh solder paste. If reusing, mix used paste with fresh in a 1:2 ratio (used-fresh). Ensure all components are mounted on the printed circuit board (PCB) within 4–6 hours after printing. If printing is paused for more than 1 hour, remove solder paste from the stencil and repack it into the paste jar. After 24 continuous hours of printing, discard any leftover solder paste to prevent quality degradation. For optimal print quality, clean both sides of the stencil every 4 hours. Use isopropyl alcohol (IPA) to clean any misaligned or excess solder paste from PCBs.

For more details, please visit Our Website at www.pai-aimsolder.com or
Write to us on support@pai-aimsolder.com