

SE-CURE™ 9753 RJ9

Water Soluble, Wafer Reflow Flux

Product Description

Kester SE-CURE 9753 RJ9 is a water soluble wafer reflow flux. SE-CURE 9753 RJ9 is specially design for solder bump formation on wafers up to 300 mm in diameter. SE-CURE 9753 RJ9 is capable of producing uniform flux coating and shiny oxide free bump formation with various alloys. Post reflow the residues are completely soluble in water and do not require any cleaning additives or solvents. To reduce the cost of assembling, room temperature or warm water (~65 °C) can be used to remove SE-CURE 9753 RJ9 residues. It is room temperature stable and does not require refrigeration for long term storage.

Performance Characteristics:

- Room temperature long term storage
- Residue removal by DI water (~65 °C)
- Synthetic raw materials for maximum lot-to-lot consistency and easy cleaning
- Classified as ORH1 per J-STD-004B
- Leaves bright/shiny solder bumps after reflow
- Reflow in air or nitrogen environments

RoHS Compliance

This product meets the requirements of the Restriction of Hazardous Substances (RoHS) Directive, 2015/863 for the stated banned substances.

Physical Properties

Specific Gravity (Typical): 1.11
Antoine Paar DMA 35 @ 25 °C

Kinematic Viscosity (Typical): 420cSt
Tested by Cannon-Fenske Routine Viscometer

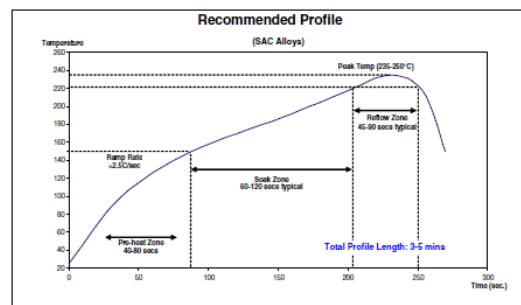
Halide Content Cl% (Typical): 0.33%
Tested by potentiometric titration

Standard Applications

SE-CURE 9753 RJ9 is designed for wafer bump reflow. SE-CURE 9753 RJ9 can be applied by standard Spray and Spin technique. The recommended initial flux amount is 0.15 to 0.20 ml/mm. For spin coating applications, an appropriate rotation speed should be used to spread this liquid flux uniformly onto the wafer. For spray applications, radial dispensing should ensure the wafer is fully coated with the flux. It is recommended the equipment flux storage tank should hold enough flux for one 8-hour shift. Flux storage tank should also be cleaned frequently to ensure the highest level of purity. Wafers should be reflowed within 2 hours of the flux deposition on the wafer surface, and should be cleaned as soon as possible after reflow.

Recommended Reflow Profile

The recommended convection reflow profile for Sn96.5Ag3.5, Sn99.3Cu0.7, or the various SnAgCu alloys is shown here. This profile is simply a guideline. As SE-CURE 9753 RJ9 is engineered to be a versatile, robust reflow flux other reflow profiles will be effective. The optimal profile for a process may be different from the one shown based on oven type. Please contact Kester if additional profiling advice is needed.



Cleaning

SE-CURE™ 9753 RJ9 residues are best removed using automated cleaning equipment (in-line or batch). A de-ionized water final rinse is recommended. Water temperatures should be 38 to 65 °C (100 to 150 °F), with water pressure of 45 to 65 psi. For best results, flux residues should be removed as soon as possible, preferably within 4 hours after reflow.

Storage, Handling and Shelf Life

SE-CURE 9753 RJ9 can be stored at room temperature, <25 °C (<77 °F) or refrigerated. If stored refrigerated, SE-CURE 9753 RJ9 should be kept at standard refrigeration conditions, 0 to 10°C (32 to 50 °F). SE-CURE 9753 RJ9 should be stabilized at room temperature prior to use if kept at below ambient temperature. Please contact Kester if you require additional advice with regard to storage and handling of this material. Shelf life is 8 months from date of manufacture when stored at room temperature and handled properly.

Health and Safety

This product, during handling or use, may be hazardous to your health or the environment. Read the Safety Data Sheet and warning label before using this product. Safety Data Sheets are available at <https://www.kester.com/downloads/sds>.

Contact Information

To confirm this document is the most recent version, please contact Assembly@MacDermidAlpha.com

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE. Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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