

HA-1025 Hot Air Flux

GENERAL DESCRIPTION

HA1025 is a high flash point, low viscosity water-soluble flux formulated expressly for high temperature vertical hot air leveling systems, both manual and automatic. The viscosity is controlled to minimize de-wetting on surface mount pads and is formulated to insure first pass coverage on even difficult boards. HA1025 provides complete solder coverage on solder mask defined pads. There are also additives to this flux to minimize bridging on fine pitch surface mount pads. This flux is also especially suited for flat finishes on surface mount pads.

HA1025 has been formulated to give very low ionic contamination when used with an appropriate post cleaning process. HA1025 is ideal for compatibility with Delphi C-7000 ionic contamination standards.

BENEFITS

- 1. Complete solder coverage on solder mask defined pads.
- 2. Excellent solder cosmetics.
- 3. First pass coverage.
- 4. Formulated for low ionic contamination values.
- 5. Non-Foaming. Easy to rinse.
- 6. Additives to minimize bridging on tight tolerance boards.
- 7. Excellent protection of solder mask and laminate during extended dwell times.
- 8. High flash point for lower accumulation of flux residue in vertical hot air leveling systems.

APPLICATION

HA1025 has a high flash point combined with good water solubility. When used, this flux should not be diluted or mixed with water or other chemicals. In automatic equipment, follow manufacturer's suggestions for equipment use. When used in manual machines, dip boards in flux and squeegee off excess (a thin film of flux is all that is required) and preheat. A dwell time of 2-4 seconds is recommended for best result (depending on the type of machine and the thickness of the board). Always rinse boards after processing because the flux remains active and will cause corrosion. DI water is recommended for final rinsing to lower ionic contamination. Rinse aids can also aid in reducing ionic residues if necessary.

Operating Parameters

| PARAMETERS | VALUES |
|----------------------|---------------------|
| Make-Up | 100% HA1025 |
| Temperature | Room Temperature |
| Immersion Time | N/A |
| Process | Batch |
| Agitation | Not Necessary |
| Ventilation | Advised |
| Tanks | Polypropylene, CPVC |
| Racks and Baskets | PVS Coated |
| Heaters | Not Necessary |
| Filtration | Not Necessary |

Physical Properties

| PROPERTIES | |
|------------------------|----------------------------|
| Specific Gravity | 1.07 - 1.12 |
| Appearance | Light to dark amber liquid |
| pH (5% soln) | 1.0 to 3.5 |
| Odor | Mild |
| Flash Point | >570F |
| Viscosity (Brookfield) | 80 - 120 cPs |
| | |

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CONTROL PROCEDURES

Consumption of flux is normally limited by drag out. Specific gravity should be controlled within 0.03 units. Dragging water in will lower the specific gravity and evaporation of water in flux will increase the specific gravity.

Ionic contamination can be reduced through the use of an appropriate post cleaning process. We recommend the use of RO water rinses, and a rinse aid chemical like our RA2000 product. Contamination levels as low as 0.1 micrograms per sq. inch of bromide ion can be obtained when using this hot air flux.

ANALYSIS

Specific gravity analysis can be used to add water if necessary (see "Control Procedures"). This is not recommended for normal use of HA1025 flux.

SAFETY AND STORAGE

HA1025 is acidic and should be handled with care. Avoid open flames. Do not store in direct sunlight, high temperature or below freezing.

WASTE TREATMENT

Hot Air Fluxes should not be bled into waste treatment systems-especially resin columns and filtration units. Normally, the spent flux is pH neutralized with caustic soda and sent to a hazardous materials waste handler for fuel blending. Consult with local officials for further waste disposal regulations

Please ask a Florida Cirtech technical sales rep. for more information regarding waste treatment of this chemistry and our complete line of waste treatment chemistry if additional help or information is desired.

MISCELLANEOUS

- Packaging comes in 5-gallon pails and 55-gallon drums. Consult MSDS sheet for additional information.
- The information given in this technical data sheet is to the best of our knowledge accurate. It is intended to be helpful but no warranty is expressed or implied regarding the accuracy of such data. It is the users responsibility to determine the suitability of his own use of the product described herein; and since conditions of the use are beyond our control, we disclaim all liability with respect to the use of any material supplied by us. Nothing contained herein shall be construed as permission or as recommendations to practice any patented invention without a license from the patent owner nor as recommendation to use any product or





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