

952-S Soldering Flux

Low-Solids, No-Clean Liquid Flux for Photovoltaic Assembly

Product Description

Kester 952-S is a zero-halogen, non-rosin organic flux designed specifically for use in tabber and stringer equipment of Photovoltaic Assembly (PV) module industry by soldering tabs to cell contacts. 952-S could be applied directly to interconnecting ribbon by hand soldering or auto-equipment with tabber and stringer soldering system, by dipping or spraying. The extremely low solids content (< 2%) and nature of the activator system results in practically no residue left on the cell after soldering. Cell are dry and cosmetically clean as they exit the tabber and stringer machine. 952-S has a wider operating window varying with temperature range, and can be used in SnPb, SnAgPb and Pb-free alloys.

Performance Characteristics:

- Zero-Halogen
- Produces high reliable ribbon that interconnects solar cells
- Wetting and Drying quickly allowing fast throughput
- Eliminates cleaning process
- Leaves less uniform residue to get higher power transfer efficiencies
- Classified as ORL0 per J-STD-004
- Compatible with the most popular EVA
- Can be applied by spraying and dipping
- Low-Solids

RoHS Compliance

This product meets the requirements of the Restriction of Hazardous Substances (RoHS) Directive, 2011/65/EU for the stated banned substances.

Physical Properties

Specific Gravity (typical): 0.8

Anton Paar DMA 35 @ 25 °C

Acid Number (typical): 12.7 mg KOH/g flux

Tested by potentiometric titration

Percent Solids (theoretical): <2%

Reliability Properties

Copper Mirror Corrosion: Pass

Tested to J-STD-004, IPC-TM-650, Method 2.3.32

Corrosion Test: Pass

Tested to J-STD-004B, IPC-TM-650, Method 2.6.15

Chloride and Bromide: None Detected

Tested to J-STD-004, IPC-TM-650, Method 2.3.35

Silver Chromate: Pass

Tested to J-STD-004, IPC-TM-650, Method 2.3.33

Fluorides by Spot Test: Pass

Tested to J-STD-004, IPC-TM-650, Method 2.3.35.1

Flux Application

Need to ensure flux is sufficiently applied on the cell to prevent dewetting and residues.

Process Considerations

952-S is engineered for the PV module industry for both automated tabber and stringer application, and hand soldering. Standard pre-heating and heat temperature can be used without special cooling or pre-baking required. Consult your machine supplier or Kester Technical Support for further information.

Cleaning

952-S flux residues are non-conductive, non-corrosive and do not require removal in most applications. If residue removal is required, contact Kester Technical Support for further cleaning recommendation.

Storage, Handling and Shelf Life

952-S is flammable. Store away from sources of ignition. Shelf life is 1 year from the date of manufacture when handled properly and stored between 10 to 25 °C (50 to 77 °F).

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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