

## 955 Soldering Flux

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

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### Product Description

Kester 955 Soldering Flux is a low solid, low residue, no-clean non-rosin organic flux designed specifically for use in tabber and stringer equipment of Photovoltaic Assembly (PV) through soldering tabs to cell contacts. 955 can be applied directly to interconnecting ribbon by hand soldering and auto-equipment with tabbing and stringing soldering system, and by dipping or spraying methods. The extremely low solids content (around 1.6%) and nature of the activator system results in practically no residue left on the cell after soldering. Cells are dry and cosmetically clean as they exit the tabber and stringer machine. 955 has a wide operating window and temperature range. It can be used in SnPb, SnAgPb and Pb-free applications.

### Performance Characteristics:

- Halide-free
- Low solid
- Minimal residue after reflow
- Eliminates cleaning process
- Fast throughput due to quick wetting and drying
- Excellent slip reduction
- Produces high reliable ribbon that interconnects solar cells
- Less residue that support higher power transfer efficiencies
- Compatible with EVA
- Classified as ORL0 per J-STD-004 and conforms to Bellcore GR-78 requirement
- Can be applied by using spraying method or via dipping tank

### RoHS Compliance

This product meets the requirements of the Restriction of Hazardous Substances (RoHS) Directive. Additional RoHS information is located at <https://www.kester.com/downloads/environmental>.

### Physical Properties

**Appearance:** Clear, colorless liquid

**Specific Gravity:** 0.800

Anton Paar DMA 35 @ 25 °C

**Acid Number (typical):** 10.0 mg KOH/g of flux  
Tested by potentiometric titration

**Flux Percent Solids (wt/wt) (theoretical):** 1.6%

**Dry Residue:** Less than 0.1%

## 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-004, IPC-TM-650, Method 2.6.15

**Surface Insulation Resistivity (SIR) (typical):** Pass  
Tested to J-STD-004A, IPC-TM-650, Method 2.6.3.3

	Blank	955
96 hr (ohm)	$2.5 \times 10^{10} \Omega$	$2.5 \times 10^{10} \Omega$
168 hr (ohm)	$2.0 \times 10^{10} \Omega$	$2.0 \times 10^{10} \Omega$

## Flux Application

955 can be applied by a spraying or dipping application method.

## Process Considerations

955 is engineered for the PV industry. The chemical flux is designed for both automated tabber and stringer application, including hand soldering. Standard pre-heating and heat temperature can be used without special cooling or pre-baking. Consult your Equipment Supplier or Kester Technical Support for further information.

## Cleaning

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

## Storage, Handling and Shelf Life

955 is flammable. Store away from sources of ignition. Shelf life is 1 year from the date of manufacture when handled properly and held at 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](mailto: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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