

KESTER® 955 SOLDERING FLUX

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

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.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES & BENEFITS

- 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.

TECHNICAL DATA

Category	Results	Procedure/Remarks
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)	1.6%	Theoretical
Dry Residue	Less than 0.1%	
Reliability Properties		
Copper Mirror Corrosion	Pass	J-STD-004, IPC-TM-650, Method 2.3.32
Corrosion Test	Pass	J-STD-004, IPC-TM-650, Method 2.6.15
Surface Insulation Resistivity (SIR) (typical)	Pass	J-STD-004, IPC-TM-650, Method 2.6.15

		Blank	955
96 hr (ohm)		2.5*10 ¹⁰ Ω	2.5*10 ¹⁰ Ω
168 hr (ohm)		2.0*10 ¹⁰ Ω	2.0*10 ¹⁰ Ω

FLUX APPLICATION

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

PROCESS CONSIDERATIONS
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 temperatures can be used without special cooling or pre-baking. Consult your Equipment Supplier or MacDermid Alpha 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 MacDermid Alpha Technical Support for cleaning recommendations.

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).

RECYCLING SERVICES

We provide safe and efficient recycling services to help companies meet their environmental and legislative requirements and at the same time, maximize the value of their waste streams.

Our service collects solder dross, solder scrap, and various forms of solder paste waste. Please contact your local sales representative for recycling capabilities in your area.



SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. **Safety Data Sheets are available.**

CONTACT INFORMATION

www.macdermidalpha.com

North America 140 Centennial Avenue Piscataway, NJ 08854 1.800.367.5460	Europe Unit 2, Genesis Business Park Albert Drive Woking, Surrey, GU21 5RW, UK 44.01483.758400	Asia 8/F., Two Sky Parc 51 Hung To Road Kwun Tong, Kowloon, Hong Kong, SAR China 852.2500.5365
---	---	--

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

DISCLAIMER: All statements, technical information and recommendations contained herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed. No statement or recommendation shall constitute a representation unless set forth in an agreement signed by officers of seller and manufacturer. NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY IS MADE. The following warranty is made in lieu of such warranties and all other warranties, express, implied, or statutory. Products are warranted to be free from defects in material and workmanship at the time sold. The sole obligation of seller and manufacturer under this warranty shall be to replace any noncompliant product at the time sold. Under no circumstances shall manufacturer or seller be liable for any loss, damage or expense, direct, indirect, incidental or consequential, arising out of the inability to use the product. Notwithstanding the foregoing, if products are supplied in response to a customer request that specifies operating parameters beyond those stated above, or if products are used under conditions exceeding said parameters, the customer by acceptance or use thereof assumes all risk of product failure and of all direct, indirect, incidental and consequential damages that may result from use of the products under such conditions, and agrees to exonerate, indemnify, defend and hold harmless MacDermid, Incorporated and its affiliates therefrom. No suggestion for product use nor anything contained herein shall be construed as a recommendation to use any product in a manner that infringes any patent or other intellectual property rights, and seller and manufacturer assume no responsibility or liability for any such infringement.

© 2019 MacDermid, Inc. and its group of companies. All rights reserved. "(R)" and "TM" are registered trademarks or trademarks of MacDermid, Inc. and its group of companies in the United States and/or other countries.