

# ALPHA FLUITIN 1535

## No-Clean Cored Solder Wire

Type: J-STD-004 –ROL1 / IPC-SF-818-L2CN / ISO 12224 – 1.1.2 / DIN 8511–F–SW26 Europe Only

# DESCRIPTION

**ALPHA Fluitin 1535** is an activated rosin cored solder wire developed for general hand soldering applications. The unique activator system offers good thermal stability at pre-soldering temperatures ensuring that **ALPHA Fluitin 1535** performs extremely well on parts and surfaces which present poor or difficult soldering conditions.

**ALPHA Fluitin 1535** leaves post-soldering residues that are hard and which can be safely left without the need to remove them. If the removal of residues is required then semi-aqueous or aqueous systems can be used effectively.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

## FEATURES AND BENEFITS

- ROL1 Suitable for J-STD-001B Class III High performance electronic products.
- Minimal, non-corrosive, clear and safe residues.
- Very fast wetting.
- Good spread characteristics.
- Pleasant pine smell.
- Ease of solderability.
- Provides good joint appearance.

## **APPLICATION GUIDELINES**

ALPHA Fluitin 1535 is suitable for use in any commercial no-clean hand soldering application that specifies compliance to J-STD-004 – ROL1 standard.

This applies to products where continued high performance or performance on demand is crucial and equipment downtime cannot be tolerated and / or the end use environment may be uncommonly harsh. This classification would typically include military weapons, and defense systems, aerospace, life support systems and under the hood automotive electronics.





## HINTS AND TIPS ON SOLDERING IN GENERAL

Always remember that a soldered joint is formed by heating the parts to be soldered to a temperature in excess of the melting point of the alloy to be used – in hand soldering this is how a soldering iron is used. By feeding the cored wire onto the parts, the flux is able to flow and remove oxide films, whilst the solder creates a thin intermetallic bond which becomes the solder joint.

Note the following tips:

- Use a soldering iron bit size and form to suit the operation: small bits for soldering large components may prevent the formation of a joint or slow the process down.
- Always select wire diameters to suit both soldering iron bit and the parts/components to be soldered.
- Soldering irons systems should provide sufficient heat to satisfy the requirements of the points above.
- Cored solder wires can be provided in different grades of alloy so always ensure you have selected the right grade for the application.
- Do not overheat as this causes an increase in the depth of the intermetallic layer, which in turn weakens the joint.

All ALPHA soldering materials are manufactured to meet the most stringent of standards and to ensure the best possible finish to every soldering application.

The information contained herein is based on data considered accurate and is offered at no charge. No warranty is expressed or implied regarding the accuracy of this data. Liability is expressly disclaimed for any loss or injury arising out of the use of this information or the use of any materials designated.

#### **TECHNICAL DATA**

Category	Results	
Physical Properties		
Rosin Grade	WW per Fed Spec. LL-R-626	
Rosin Softening Point	71 °C (160 °F)	
Acid Value:	170 to 190 (mg KOH/g)	
Halide Content	0.35 to 0.45% (by weight)	
Corrosiveness	Classified to J-STD-004 as L type material	
Copper Mirror	Classified to J-STD-004 as <50% breakthrough	





Category	Results
	Passes
Surface Insulation Resistance (Not Cleaned)	IPC-SF-818 Class III
	Test results to J-STD-004 85 °C/85% RH / 7 days CD = 3.73E10 Ohms CU = 3.22E10 Ohms
	(Pass >1E08 Ohms)
Classification	J-STD-004 – ROL1
	IPC-SF-818 – L2CN
	ISO 12224 – 1.1.2.
	DIN 8511 – F – SW26

Standard	Alloy Designation	Meting or Solidus / Liquidus Temp °C	Flux Configuration
ISO 9453 (2)	S-Sn60Pb40	183 to 190	2.2%
ISO 9453 (5)	S-Pb60Sn40	183 to 235	2.2%

## **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 or <u>link here</u>.







## **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 at MacdermidAlpha.com/assembly-solutions/knowledge-base.** 

## **CONTACT INFORMATION**

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

www.macdermidalpha.com

North America	<b>Europe</b>	<b>Asia</b>
109 Corporate Blvd.	Unit 2, Genesis Business Park	8/F., Paul Y. Centre
South Plainfield, NJ 07080, USA	Albert Drive	51 Hung To Road
1.800.367.5460	Woking, Surrey, GU21 5RW, UK	Kwun Tong, Kowloon, Hong Kong
1.800.367.5460	Woking, Surrey, GU21 5RW, UK 44.01483.758400	Kwun Tong, Kowloon, Hong Kong 852.3190.3100

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 IN FORMARY 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 and some stated above, or if products are user 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 thereform. No suggestion for product use nor anything contained herein shall be construed as a recommendation to use any product in a manufacturer or other intellectual property rights, and seller and manufacture 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.

