

ALPHA® POWERBOND IA-72 SOLDER PASTE

DESCRIPTION

ALPHA PowerBond IA-72 is an inorganic acid type solder paste that is water-soluble before and after reflow. This paste is specifically formulated for pressure dispensing applications. **ALPHA PowerBond IA-72** is excellent for printing applications with high temperature alloys.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

APPLICATION GUIDELINES

ALPHA PowerBond IA-72 may be used with only a limited amount of surface preparation of relatively dirty surfaces even where gross dirt is present the activator systems enable the flux to penetrate the surfaces of the following metals:

Nickel	Cadmium Plate	Tin – Nickel
Steel	Silver Plate	Tin – Zinc
Brass	Tin (Hot Dipped)	Copper
Bronze	Tin (Plate)	Stainless Steel*
Lead	Terne Plate	

* Some grades with proper pre-treatment

Residue

The flux residues remaining on the work surface after the reflow are water-soluble. Because the flux is corrosive, the residue and excess solder paste should be removed immediately after soldering with hot water (70° or hotter) while the soldered area is still warm. The flux residue, if allowed to remain, will attack the solder and the assembly to form corrosion products.

TECHNICAL DATA

Category	Results	Procedure/Remarks
Physical Properties		
Appearance	Grey Paste	
Water Solubility	10 to 30%	Depending on Metal Load
Residue Removal	Warm Water	
Odor	None	
Melting Point	Depends on Alloy	

REFLOW PROFILES

ALPHA PowerBond 1A-72 can be successfully reflowed by infrared, convection, induction, furnace, hot air gun, and open flame heating methods. When using an open flame, the fluxes may ignite. An air jet or stream is recommended to extinguish the flame and minimize flux charring. Reflow temperature should be approximately 30 to 700 °C (54 to 126 °F) above the liquidus for alloys melting below 260 °C (500 °F) and 20 to 50 °C (36 to 90 °F) for alloys melting above 260 °C (500 °F). Peak reflow temperatures of short duration (two to five seconds) in excess of these temperatures may speed soldering and not materially affect the paste. ALPHA PowerBond IA-72 should be reflowed promptly after application followed by clean to minimize corrosion on the assembled parts.

AVAILABILITY

ALPHA PowerBond IA-72 is available in a variety of alloys, viscosities, and containers, including cartridges and syringes.

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 [link here](#).



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.**

STORAGE

High ambient temperatures should be avoided in handling. Storage temperatures of 10 to 32 °C (50 to 90 °F) are sufficient to maintain a nominal shelf life of six (6) months.

CONTACT INFORMATION

**To confirm this document is the most recent version, please contact
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www.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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