

SOLDER PASTE HANDLING GUIDELINES

Europe Only

INTRODUCTION

Below are the general guidelines to be used for handling ALPHA® Solder Pastes.

The product Technical Bulletin should always be referred to for verification of any specific recommendations or conditions.

STORAGE

- Long term storage of solder paste should be at refrigeration temperatures (0 to 10 °C). Solder paste should be placed in storage designed to maintain this temperature range immediately upon receipt.
- ALPHA Solder Pastes can be safely exposed to room temperature (typically 19 to 25 °C) for short periods during production, transportation and use, without detrimentally affecting product performance or reducing the useful life.
- Cartridges are best stored vertically, tip down. If stored horizontally, best practice is to turn cartridges 180° once every week.
- Typical solder paste shelf life is 6 months when these conditions are followed. Check product Technical Bulletin for exceptions.

TRANSPORT

- ALPHA packaging and transport solutions are suited to the typical climates in each geographic region.
- In Europe, ALPHA has adopted a minimal packaging approach as standard and supplement this with the use of refrigerated transport or insulated packaging, as required.
- Refrigerated transport is the preferred option if the forecasted daytime peak temperatures are above 15 °C during an expected transit time.
- In the case of small parcel deliveries, over-packaging with insulating material and 'ice-gel' packs are an option, which can keep the product temperature below 25 °C for up to 24 hours.
- Melted 'ice-gel' packs are not necessarily an indication of exposure to high temperature
- Our distribution partners take active responsibility during final transport and delivery to customers for maintaining the integrity of ALPHA Solder Pastes.

USE

- Paste should always be used on a 'First-In-First-Out' (FIFO) basis.
- Solder paste should be allowed to reach room temperature, 19 to 25 °C, without forced heating. We recommend a period of 3 to 4 hours out of refrigeration before the paste is used.
- To maintain optimum performance paste should not be stored outside the refrigerator any longer than necessary before use. Consult the specific product Technical Bulletin for a specific recommendation.
- It is recommended for solder paste packaged in jars to be stirred with a spatula, prior to use.
- Apply an even paste bead on the stencil over the width of the squeegee/image with a diameter of approximately 10 mm. Replenish when paste bead is <10 mm and replace the material when exceeded stencil life or has been exposed to high temperatures inside the printer >29 °C.
- If not all paste from a container is used, close immediately after application. Closed containers can be returned to the fridge. Open containers would subject the paste to condensation when refrigerated.
- Do not remove worked paste from stencil and mix with unused paste in jar. This will alter the rheology and possibly the moisture content of the unused paste and, potentially, negatively affect paste performance.
- Always dispose of solder paste residues in accordance with local environmental legislation. Alpha collects and recycles solder paste residues and unused solder paste. Please contact your local representative for more information.

Failure to follow these guidelines will result in reduced shelf life and diminished product performance and may make the product unsuitable for use.

Paste performance properties do not undergo a sudden dramatic change after any given period; they change slowly, with time. These changes are accelerated at higher temperatures. Shelf life issues are mostly related to printing or dispensing the product. If solder joint coalescence after reflow is good, solder joint integrity has been achieved.

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

www.macdermidalpha.com

<p>North America 109 Corporate Blvd. South Plainfield, NJ 07080, USA 800.367.5460</p>	<p>Europe Unit 2, Genesis Business Park Albert Drive Woking, Surrey, GU21 5RW, UK 01483.758400</p>	<p>Asia 8/F., Paul Y. Centre 51 Hung To Road Kwun Tong, Kowloon, Hong Kong 852.3190.3100</p>
-------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------

--	--	--