Procedures for Handling AMTECH Solder Paste

We recommend that the following guidelines be followed for the proper handling of solder paste from the time of receipt to the time of use:

**General Handling**
- AMTECH solder paste is shipped cold, with an approximate temperature of 0°C to 5°C.
- Refrigerated storage is not required but highly recommended (1°C to 10°C), as it prolongs the shelf life of the solder paste.
- Storage temperatures should not exceed 25°C.
- Solder paste should be inventoried on a FIFO (first in, first out) basis.

**Proper Handling Procedures**
- Upon receipt of solder paste cartons, place all materials in a temperature controlled environment of <=25°C.
- If a carton is not scheduled for immediate use, it should be stored in a controlled environment of <=25°C. To maximize shelf life, solder paste should be refrigerated at 1°C to 10°C.
- Use older batches of solder paste first. The batch age will be identified by the manufacturing date printed on the box or product label. If a container is opened, note the time and date on the label. Use prior to printed expiration date.
- When transporting solder paste, take adequate steps to maintain a consistent and moderate temperature of <=25°C.

**Handling Prior to Printing**
- Prior to use, allow the solder paste to slowly be brought up to room temperature. It is highly recommended that solder paste be removed from refrigeration at least 6 hours prior to printing.
  - Removing solder paste from storage 24 hours before use is recommended.
  - Do not attempt to rapidly warm the solder paste by placing it on top of an oven or by any other heating method not specifically recommended by AMTECH.
  - A temperature controlled water bath can be used provided the temperature is at or below 25°C.
  - Never open the solder paste while warming as it may cause condensation in the solder paste.
  - AMTECH recommends pre-conditioning or gently stirring the solder paste prior to use.

**Effect of Excessive Exposure to Heat**
- Do not store solder paste at temperatures in excess of 25°C, as it may result in significant flux separation and/or chemical decomposition.
- Solder paste that is damaged by heat can lead to poor printing performance due to higher viscosity and/or reduced tack caused by chemical decomposition. Consult AMTECH regarding the proper disposition of any heat damaged solder paste.

**In Process Handling**
- Replace lids on open jars to reduce the effects of oxidation and humidity.
- During down time in excess of 2 hours, remove paste from stencils to help alleviate the effects of humidity and exposure to air.
- Whenever paste is removed from a stencil, and stored for future use, it should be placed in a segregated container reserved marked as “used solder paste”.
- All opened jars or cartridges should be properly labeled with the time and date of opening.