

Storage & Handling of Specialty Fluxes

General Guidelines

- Fluxes are a shelf life item and should be managed on a first in, first out (FIFO) rotation.
- Syringes and cartridges should be stored tip down.

Ideal Handling Procedures

- Store fluxes as recommended by the certificate of analysis (CoA).
- Materials that are not scheduled for immediate use should be stored between 0-30°C, preferably in an air conditioned/ambient environment. Fluxes can also be stored in a chiller, between 0-10°C. Some products may require special temperature storage.
- For FIFO rotation, batch age can be identified by the manufacturing date on the box, jar, or syringe label. Use the material before the expiration date noted on the label.

Thawing, Handling and Usage

If the material is stored in a chiller, refer to the guidelines (below) for the thawing process.

TACFluxes®

- Standard minimum thawing time:
 - 100 gm/jar - 4 hours
 - 5cc & 10cc syringes - 2 hours
 - 30cc syringes - 3 hours.
 - Longer thawing times under a controlled environment will not have a negative effect on the integrity of the TACFlux®.
- Rapid warming or heating is **not** recommended.
- Typical pot life for printing and/or dipping in a controlled environment (operating temperature of 23-28°C and operating humidity level 40% - 60%RH) is a minimum of 8 hours. Depending on the top-up frequency and amount of shearing (stirring) of the flux, the pot life can be extended up to 12 hours or more.
- Unused flux left in a syringe with a sealed tip will adhere to the same shelf life. However, for a good control use the flux within 14 days from the time the syringe is opened. For an open syringe without a sealed tip, it is best to use the flux within 48 hours.
- The above are guidelines only; a DOE should be conducted using a customer-established process to define the optimum process control for this material.

Flip-Chip Fluxes

- Standard minimum thawing time is 4 hours. A longer thawing time under a controlled environment will not have a negative effect on the integrity of the flip-chip flux. It is not uncommon to practice over-night thawing.
- Rapid warming or heating is **not** recommended.
- Pot life for spraying, printing, and/or dipping in a control environment (operating temperature of 23-28°C and operating relative humidity 40% - 60%RH) is a minimum of 8 hours.

PoP Fluxes

- Standard minimum thawing time is 4 hours. A longer thawing time under controlled environment will not have a negative effect on the integrity of the POP flux.
- Rapid warming or heating is **not** recommended.
- Pot-life (usage life) for printing and/or dipping in a controlled environment (operating temperature of 23-28°C and operating humidity level 40% - 60%RH) is a minimum of 8 hours. Depending on the top-up frequency and amount of shearing (stirring) of the flux, the pot-life can be extended to 12 hours or more.
- Unused flux left in a syringe with a sealed tip will adhere to the same shelf life. However, for a good control use the flux within 14 days from the time the syringe is opened. For an open syringe without a sealed tip, it is best to use the flux within 48 hours.
- The above are guidelines only; a DOE should be conducted using a customer-established process to define the optimum process control for this material.

This Application Note is provided for general information only. It is not intended, and shall not be construed, to warrant or guarantee the performance of the products

described which are sold subject exclusively to written warranties and limitations thereon included in product packaging and invoices.

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