

No-Flow Underfill Handling Guidelines

Scope

The purpose of this document is to provide guidelines for PCB assemblers on the use and handling of Indium Corporation's no-flow underfills. For questions regarding a specific underfill, please contact Indium's Technical Support team.

Shipping/Receiving

Shipping: No-flow underfill shipped from Indium Corporation will be packaged with dry ice to ensure the material remains at a suitably low temperature until it reaches the customer. After the package is delivered, remnants of the dry ice are often still in the shipping box. If no dry ice remains AND if the NF-260 syringes are no longer cold to the touch, Contact Indium Corporation immediately to determine the appropriate course of action. If the underfill has been exposed to elevated temperatures for a prolonged period, the performance of the product may be affected.

Receiving: Upon receipt of the material, the inner box should be removed immediately from the dry ice (-78°C) and placed into a -40°C freezer for a minimum of 6 hours before use. This allows for a more gradual temperature increase to a standard storage temperature from the dry ice temperatures. Taking the underfill from dry ice straight to room temperature can thermally shock the material and the syringes, which can lead to air voids in the underfill.

Use/Handling

Preparing Underfill for Use: The underfill should be brought to room temperature before using. Once the underfill has been stored at -40°C for at least 6-hours, it can be removed from the freezer in preparation for use. It usually takes one to two hours for the underfill to reach room temperature. As they warm, the syringes should be stored tip down. To prevent moisture condensation while warming, place the syringes in a dry box. If a dry box is unavailable, the syringes should be placed in a sealed bag with a desiccant immediately upon removal from the freezer. Accelerated warming techniques should not be used because it can affect the performance and pot life of the underfill.

In addition, because of their limited pot life, underfills should not be refrozen after use.

APPLICATION NOTE

Form No. 98154 R1

S O L D E R

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