

Scope: BioArchive Overwrap Bag (part number 7-01-150)

Purpose: Preventing breaches in the overwrap bags

Background: During storage of a sample, liquid nitrogen (LN2) may be introduced into a breached overwrap bag. When an overwrap bag containing LN2 is warmed (which occurs upon retrieval), LN2 quickly turns to vapor causing extreme pressure on the bag. In some cases the bag may expand to a point of separation.

Breaches in an overwrap bag can occur if:

- 1) The overwrap bag is improperly stored.
- 2) The overwrap bag is not adequately sealed.
- 3) The overwrap bag is pinched by the canister during closing of the canister.

See procedures below for proper handling.

Procedure: Storage of the Overwrap Bag

1. Make sure that unused overwrap bags remain in the box.

Procedure: Sealing the overwrap bag using the Fuji Sealer

1. Open the Air Expressor. Place the overwrapped sample into the Air Expressor with the open end of the bag over the Heating Element.
2. Close the lid of the Air Expressor. Energize the sealer by pulling down the handle and closing the Pressure Lever. The red light turns on and will be illuminated for the duration of the heating period, then turns off.
3. When the red light goes off, hold the handle down for at least three more seconds. Release the handle and remove the bag.
4. Inspect the seal for any creases through the sealed area or any other visible indications of poor seal. If there is any evidence of a poor seal, remove the sample from the overwrap bag. Place the sample in a new overwrap bag and begin the sealing process from step 1.

For best results, we recommend adjusting the Heating Time Dial to 6. Please refer to the Fuji Sealer Operating Instructions for proper set up of your sealer.

Procedure: Placing the overwrap bag containing your sample into the canister

1. Open the canister.
2. Place the overwrap bag containing the freezing bag into the canister.
3. Ensure that the edges of the bag do not exceed the canister perimeters.
4. Close the canister. Take proper care not to pinch any part of the overwrap bag when closing the canister.

Refer to your BioArchive System Operator Manual for additional details (Rev C, see page 47. Rev D, see pages 8-3 and 8-6).

If you have any questions, contact THERMOGENESIS CORP. Customer Service at 800-783-8357 (U.S. and Canada) or 916-858-5100 (non-U.S./Canada) for assistance.