

# Product Parts of Liquid Nitrogen Bio Container BASIC OPERATIONAL GUIDE



## Operations

#### 2.1 Initial Usage

- 1. When adding liquid nitrogen indoors, ensure good ventilation to prevent oxygen deficiency.
- 2. New containers may take 2-3 days to reach a stable temperature.
- 3. Pre-cool new or thawed containers with a small amount of liquid nitrogen.
- 4. Fill slowly, ensuring the liquid level doesn't exceed the neck's lower end.
- 5. Check for condensation or frost within 2-3 hours after placing frozen items.
- 6. Avoid direct contact with liquid nitrogen to prevent frostbite.
- 7. Be careful to prevent collisions or heavy pressure that could damage the container.

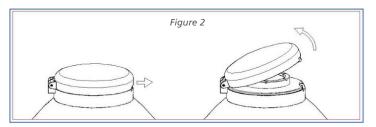
#### 2.2 Sample Storage

- 2.2.1 Sample Labeling:
- 1. Use slots numbered 1-6 on the container's neck and label cryoboxes accordingly.
- 2. Document storage and retrieval with clear labels, e.g., "2-3-16" for a sample in Slot 16, Level 3 of Canister 2.

#### 2.2.2 Lid Design:

The container's lid has a self-locking mechanism. Follow these steps:

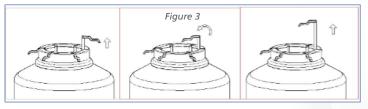
1. To open, firmly grasp the upper edge and flip it upwards.



2. A "click" sound means it's securely closed when closing the lid.

#### 2.3 Canister Retrieval:

- 2.3.1 Sample Labeling:
  - 1. Lift the canister about 40-80mm, then rotate the handle 180°.
  - 2. Continue lifting to extract the canister.
  - 3. Avoid removing the canister completely.
  - 4. Access samples at the neck, wear cryogenic gloves, and extract the labeled sample.
  - 5. When returning the canister, ensure it's in the slots and close the container cover securely.



Please remember to wear cryogenic gloves throughout the operation to prevent frostbite.

### Maintenance

No.	Description of Task to Perform		Maintenance to be carried out		
			On going	As Needed	As Recommended
1	Pre-cool container before filling with liquid	During initial filling or refill- ing, pre-cool with a small amount of liquid nitrogen for thermal equilibrium		~	
2	Monitor liquid nitrogen levels regularly	Regularly monitor liquid nitrogen levels, especially for first-time users.	~		
3	Keep records of container usage and maintenance	Maintain a record of any maintenance or service performed on the container in the Maintenance/ Service Log.	✓		
		Follow manufacturer's guidelines for service and maintenance.			~

#### Caution:

This LN Tank is for indoor static storage only. It is not designed for vehicle transportation.

For transportation, use shockproof containers specially designed for liquid nitrogen. Avoid collisions and severe vibrations.



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