



Product Information
Helfpul Hints / FAQs
Accessories



MVE Chart Tech Tips

January, 2012

PRODUCT INFORMATION

MVE Stock Series

MVE Stock Series tanks are primarily designed for storage of either vials or straws on canes in liquid nitrogen or liquid nitrogen vapor. The tanks are built for long life, durability in service and ergonomic sample retrieval, all of vital importance for this type of storage environment. The rotating sample tray in the 1842P-150 allows for maximum storage space and easy convenient access.

Contact Chart for product details and information.

Discharge Device for Lab Series

The manual discharge device offers a convenient, safe method to withdraw liquid nitrogen. This ergonomic method provides a good way to transfer liquid without having to lift a Dewar to physically pour the liquid. Contact Chart for product details and information.



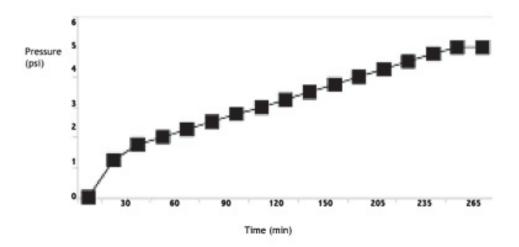
Discharge Device on Lab 20

HELPFUL HINTS / FAQS

Manual Discharge Device Operation

Q: How long does it take for the manual discharge device to build pressure?

A: Depending on atmospheric conditions, it takes anywhere from two to four hours to build to 0.3 bars (5 psi). The manual discharge device operates using temperature difference. The nozzle is exposed to the atmospheric temperature. This heat conducts down to the dip tube which makes contact with the liquid nitrogen. The liquid nitrogen is much colder than the dip tube, causing the liquid to boil off. When the discharge device is installed correctly (properly seated, vent valve closed), the head pressure pushes down on the liquid nitrogen, allowing it to be forcefully expelled from the nozzle. A warm, full dewar will build pressure more quickly.



Discharge Device and a Lab10 Pressure Build to 0.3 bars (5 psi) = 4 hours

Installing the Liquid Discharge Device

Q: How does one install the discharge device?

A: Fill the Lab unit to its approximate liquid capacity; slowly insert the discharge device, allowing it to rest on the neck for about 30 seconds; let it cool to LN2 temperature, attach the safety cable to the handle, insert fully into the neck, and then slowly tighten the wing nut. The discharge device will build pressure to 0.3 bars (5 psi) and will be ready for use.

ACCESSORIES

Temperature Probe Sealant for Chart HE Series Freezers

The temperature probe sealant is P/N 14243599.

Liquid Level Measuring Tool for Aluminum Dewars

The liquid level measuring tool P/N 5613469.

Upcoming Serial Number Format Change

The serial number on Chart MVE aluminum vessels will be changing effective the beginning of 2012. The stainless steel freezer serial numbers will not change as they already have the new format. Below is an example of a current aluminum MVF vessel serial number:

B2011H2046

This serial number has 4 distinct sections:

B20 11 H 2046

B20 - Is a constant internal MVE code. This is the same on every vessel. 11 - is the year of manufacture. Example '11' means 2011. H - is the month of manufacture in alphabet order (Example 'H' means August) 2046 - is the number that vessel was in production for that month.

*How is this going to change?

A new section will be added to the serial number and the month code section will change to a week section. Below is an example of the new aluminum MVE vessel serial number:

NPB2011012046

This serial number has 5 distinct sections:

NP B20 11 01 0546

NP - is the site of manufacture. Example 'NP' means New Prague.

B20 - is the same constant internal MVE code.

11 - is still the year of manufacture.

01 - is the week of manufacture. Example '01' means the first week of the year.

0546 - is the number that vessel was in production for that week.

In summary, there are 2 changes coming to the MVE serial number in 2012. First, there will be a 2-letter addition to the front indicating the site of manufacture. Second, the month of manufacture will change to the week of manufacture.

