


STANDARD OPERATING PROCEDURE OF LYOPHILIZER

 <p>BLDEA'S SSM COLLEGE OF PHARMACY & RESEARCH CENTRE Mahaswamiji College of Pharmacy & Research Centre Vijayapur 586103</p>	DEPARTMENT: PHARMACEUTICS	SOP NO: Company Name: Southern scientific lab Model no: 8SI-LF Procured on: 2012-2013
	AREA : PHARMACEUTICS LAB	PAGE NO: 1 -2
	SUBJECT: SOP FOR LYOPHILIZER	EFFECTIVE DATE: 25/2/2022 REVIEW PERIOD: 25/2/2023

Purpose:

To provide a procedure for the operating of Lyophilizer

Scope:

Applicable to operation of Lyophilizer

References:

Instrument Manual

Safety Issues and Precautions:

- Wore Head cap, Mask, Hand gloves and other safety requirements during the performance of stated activity
- Please make the entry of Usage with require details in the Instrument log book
- Handle the Instrument properly with care
- After using the apparatus please clean the instrument and accessories and keep it clean

Procedure:

- 1) Enter the user details into log book.
- 2) Samples must be frozen before starting. The greater the surface area of sample to volume, the faster the drying occurs. Samples should be stored in separate containers within the provided flasks.
- 3) Check that the chamber is clean and dry. Put lid onto chamber.

- 4) Push switch to "on". The refrigeration should be set to "auto". The refrigeration compressor should come on, and when the collector reaches -40°C, the vacuum pump will start. There should be no need to use "manual" start up.
- 5) When the system vacuum level is below 133×10^{-3} m Bar, the green LED will no longer flash, and samples may be added. If it doesn't go below 133×10^{-3} bar, there is probably a leak.
- 6) Put samples in a flask and attach flask to a valve.
- 7) Turn knob on valve so that the bevel on the knob is positioned- toward the sample port.
- 8) Allow system vacuum to return to 133×10^{-3} m Bar before adding another flask to another port.
- 9) To remove a sample after drying is complete, turn knob on valve to vent position, so the bevel is away from the sample port. Carefully remove the flask and lid, leaving the glass connector in place.
- 10) When all samples are off, the system vacuum should be released by turning the knob on one of the valves to the vacuum position or by opening the condenser chamber drain hose plug.
- 11) Defrost the collector coil: Pull the drain hose out, and place it into a container. Remove plug. Pour warm water in small batches over the collector coil. Drain all liquid and dispose of properly. When completely defrosted, flush with clean water, and wipe dry with paper towel.
- 12) Please be considerate of other users, and leave the freeze-dryer clean and in good working order.
- 13) Flasks that held sample directly need to be acid washed for at least one hour.

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