

Name of Procedure:

Toxicology
Evaporation and Concentration of Samples using the Zymark TurboVap LV Evaporator

Suggested Uses:

The TurboVap LV Evaporator is utilized to quickly evaporate multiple samples.

Apparatus needed to perform procedure:

TurboVap LV Evaporator
Fume hood
Gloves
Eye protection
A supply of drying gas
Deionized water
16 x 125, 13 x 100, or 12 x 75 mm glass test tubes
16 x 125, 13 x 100, or 12 x 75 mm TurboVap rack (depending on size of test used)
Antibacterial (suggested for water bath)

Calibration of Instrument:

Not Applicable

Application of Procedure on Liquids:

1. Turn TurboVap on with switch at lower left-hand side of instrument.
2. Turn on supply of drying gas.
3. Check water bath to make sure that the proper water level is present (if not add deionized water until the appropriate level is obtained).
4. Set water bath temperature with the TEMP numeric pushwheel and allow the bath to come up to temperature (TEMP light stops blinking).
5. Place sample tubes (up to 50) into the appropriate rack.

6. Set the TIME pushwheel to the desired drying time (usually 10 ml of an organic solvent, e.g., methylene chloride, at 35 degrees C should evaporate in approximately 30 minutes).
7. Select the row(s) containing the sample(s) by pressing its corresponding TUBE STATIONS push-button (choose the button that aligns horizontally with the row).
8. Press the START button.
9. Insure that the fume hood is on while the samples are drying.
10. The TurboVap LV will sound an alarm at the end of the drying time. At that time the test tubes can be removed.

Safety Concerns:

The TurboVap LV does require 115VAC power; therefore, use caution not to disturb the water in the water bath, and avoid spillages on the TurboVap LV. The TurboVap is not classified as "Explosion Proof." Use the standard safety procedures with the solvent(s) that are being evaporated by the TurboVap.

Literature Reference:

TurboVap LV Evaporator Operator's Manual, Zymark Corporation, 1990.