

MicroVap and XpressVap

Rapid Microwave Concentration and Evaporation

MicroVap and XpressVap are the only microwave concentration systems that use temperature feedback control to automatically shut off the system when the desired volume has been reached. They can both be used to concentrate samples both pre and post digestion.



- Uses the same liner for digestion and concentration - not sample transfer
- Greatly reduces the acid volume going to ICP or ICP-MS
- Evaporation precisely controlled with insitu fiber optic probe
- Works for all acids and aqueous liquids with boiling points below 200° C
- Pre-concentration allows for larger samples and increased analyte concentrations
- Can eliminate boric acid neutralization by removal of HF after digestion
- Constructed of high purity Teflon®
- Acid fumes are safely scrubbed and neutralized via an integrated scrubbing system
- Samples are isolated preventing cross contamination
- Optional HEPA filter can create controlled clean room conditions

Two configurations available

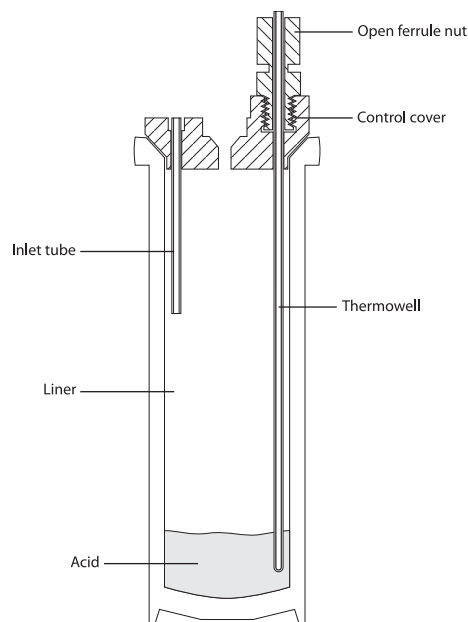
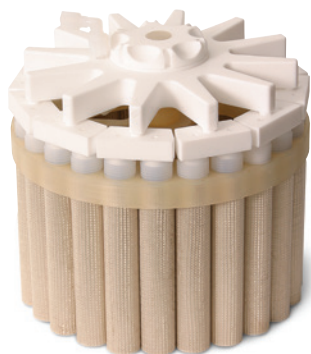
MicroVap and XpressVap come in two configurations to accommodate a variety of vessel types

- 12 position MicroVap works with EasyPrep, XP 1500, and HP 500 vessels
- 24 position XpressVap works with 55 mL Xpress vessels

MicroVap



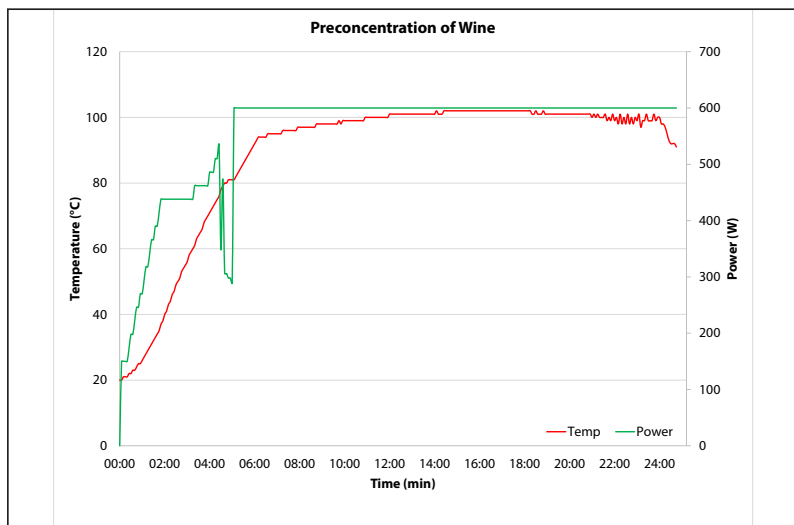
XpressVap



The fiber optic probe is in direct contact with the reagents and automatically shuts the system off when the desired volume has been reached.

Results You Can Depend On

Concentration of red and white wine using XpressVap prior to digestion



Number of Samples	12
Initial Sample Volume	23 ml
Temp Set	90° C
Ramp Time	5 minutes
Delta T	15° C

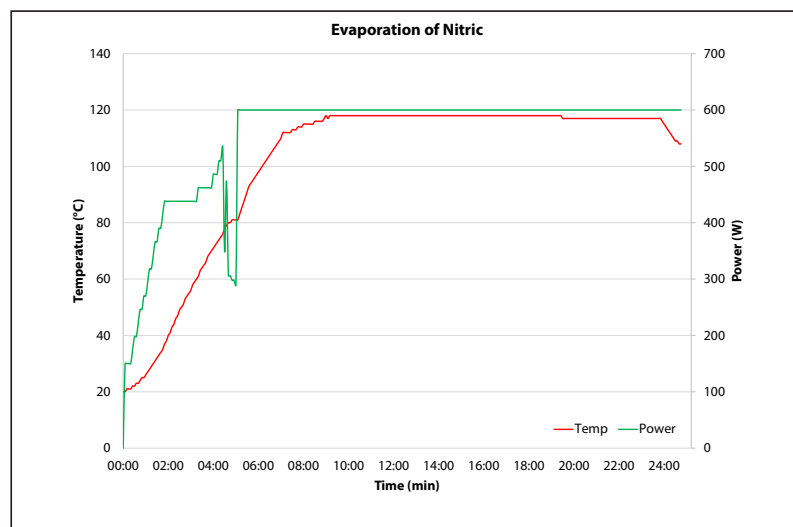
Final Sample Volume	1-2 ml
Total Time	25 minutes

The fiber optic probe automatically detected the plateau at 102° C. The system continued to concentrate until the change in temperature reached 15° C. This indicated fiber optic probe was no longer immersed in sample and the system automatically stopped.

Evaporation of Nitric Acid after Digestion using XpressVap

Number of Samples	12
Initial Acid Volume	15 ml
Temp Set	105° C
Ramp Time	5 minutes
Delta T	10° C

Final Sample Volume	1-3 ml
Total Time	25 minutes



In the post concentration step the Plateau was detected at 117° C. The system continued to run until the temperature dropped by 10° C. Preconcentration, digestion, and evaporation of all samples was done in the same liner eliminating loss or cross contamination due to sample transfer.

