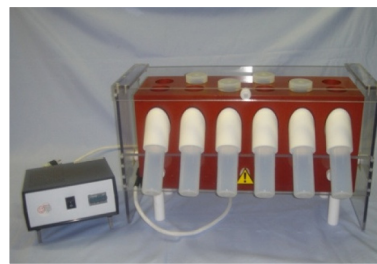
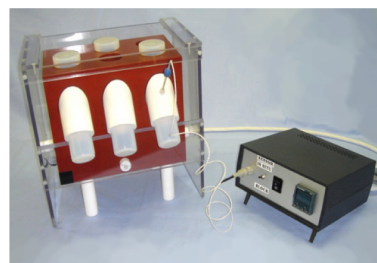
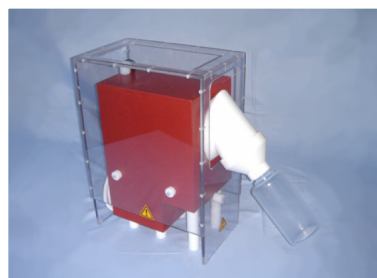


## EVAPOCLEAN® – CLEAN ACIDS®

Evaporate-Concentrate-Purify-Digest samples.



### ENHANCE TRACE ANALYSIS ELIMINATE CROSS CONTAMINATION.

EvapoClean / CleanAcids are self contained preparation devices designed to evaporate, concentrate, and condense chemical solutions and reagents using extremely controlled conditions. The uniquely designed patented device, combines sample preparation and enclosed sample purification into one component. EvapoClean / CleanAcids are designed to handle all types of samples from simple aqueous solutions through aggressive reagents such as  $\text{HNO}_3$ -HF-HCl-  $\text{H}_2\text{SO}_4$ -HBr-HClO<sub>4</sub>-NH<sub>4</sub>OH-H<sub>2</sub>O<sub>2</sub> etc.

### FREQUENTLY ASKED QUESTIONS

#### :: What applications is the EvapoClean best suited for?

The evapoclean is well suited for virtually any reagent needing purification or any sample requiring heated digestion. A unique feature is the ability to perform this operation on the same device and at the same time. Applications which can benefit from EvapoClean include geology (rocks, minerals, ores,) industrial products (cements, metals alloys, ceramics, chemicals) to advanced materials such as semi-conductor, ceramics, silicon wafers, highly pure mineral acids and organic solvents.

#### :: What acids/reagents can I use with EvapoClean / Cleanacids?

The design nature of the devices provides the greatest flexibility on the market.  $\text{HNO}_3$ -HF-HCL-HBr-HClO<sub>4</sub>- $\text{H}_2\text{S}_0_4$ -NH<sub>4</sub>OH-H<sub>2</sub>O<sub>2</sub> and many more have all been successfully used.

#### :: What type of recoveries is typical?

The EvapoClean has had significant testing and papers are available on this topic at [www.analab.fr](http://www.analab.fr) typical recoveries hover around 100% even at 50ppt spike levels.

#### :: What is the rate of evaporation?

Evaporation rates will vary depending on the configuration of the EvapoClean and the material being processed. A typical setup will yield the following rates of evaporation: EV.6.25 and EV.12.25 ~ 6 to 10mL per hour, EV.6.125 and 12.125 ~10 to 16mL per hour.

#### :: Do I need a fume hood?

The EvapoClean has completely sealed evaporation and condensation chambers. Since the evaporation takes place in a closed environment, having a fume hood is not a requirement for safety.

#### :: Will it interfere with or contaminate my clean room?

The sealed nature of the EvapoClean evaporation chambers eliminates the possibility of clean room contamination. Additionally the design of the EvapoClean also eliminates the atmosphere from contaminating sample as well as removing the possibility of inter sample contamination.

#### :: How does the installation occur?

Setting up the EvapoClean is literally four step procedure. Installation is performed by customer in just a few minutes. There are no special skills or tools required.

## TECHNICAL DATA:

EvapoClean / Cleanacid	
Models:	1 position for purification of 1 Liter 3, 6 or 12 positions for purification of 25 mL or 125 mL (with 6, 12 or 24 positions for mineralization) included 1, 3, 6 or 12 elbows and corresponding 33 mL, 180 mL, 2L vials and 1 thermal protectionL
Voltage:	230 Volts ( 100-110 Volts upon request )
Temperature:	Ambient to 250°C Uniformity +/- 2°C *Higher temperature version available upon request
Material:	Hot block: graphite PFA coated Cups: PFA Elbows: high quality PTFE

Temperature controller	
Models:	programmable: 4 programs of 16 segments up/down. Keep the temperature of instruction.
Options:	Display for external probe. Easilog, recorder of temperature with connection PC
Voltage:	230 Volts 50-60Hz ( 100-110 Volts ) 3 over temperature protections

Options:	
::	In situ Probe for the reading of the temperature, must be employed with the suitable controller
::	PTFE connection for the coupling and the cleaning of containers PFA
::	Stand for the elbows
::	Reduction to put at the reception a PFA bottle
::	Full PFA Dispenser to avoid any contaminations.

Products manufactured by Analab [www.analab.fr](http://www.analab.fr) Subject to technical changes

Certification: CEM 89/336/CEE – LVD 73/23/CEE – EN 61010

All our devices have undergone successfully the tests of acceptances with clean room class 1.

Warranty (back to plant): 1 year on electrical/electronic parts  
2 years on defect in construction