

ANALAB® CleanClever

Individual Vessel Acid Vapor Cleaning

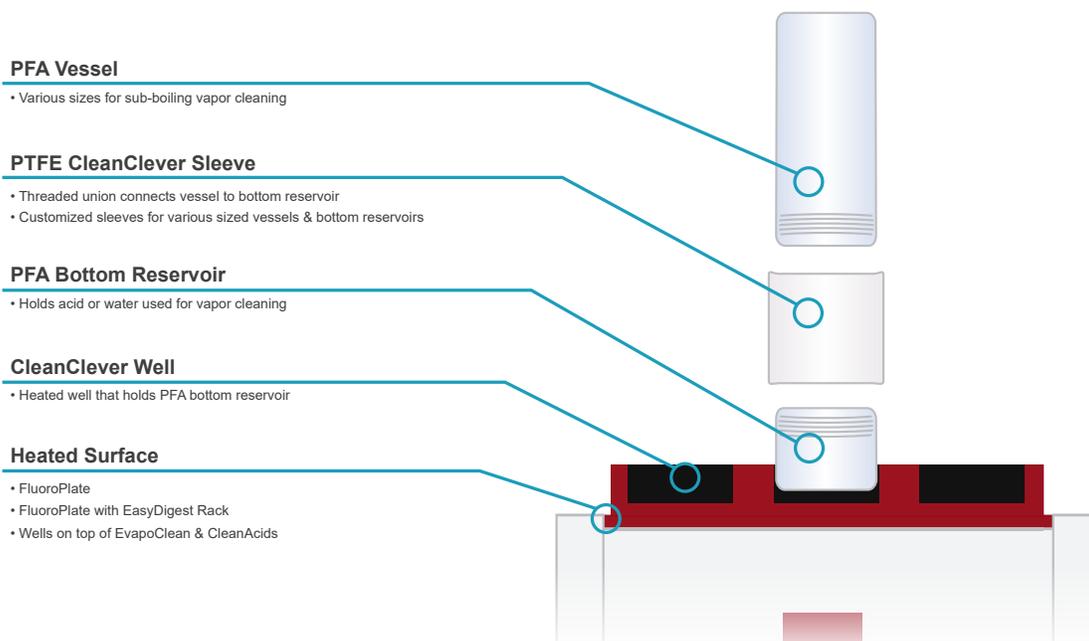


The CleanClever vapor cleaning system utilizes small volumes of acid and water to quickly clean a wide variety of vials and bottles for ultra-trace metal analysis. This highly flexible system provides a safe, simple, and effective method for removing contamination from PFA, PTFE, and glass vessels.

Cleaner Vessels = Better Results

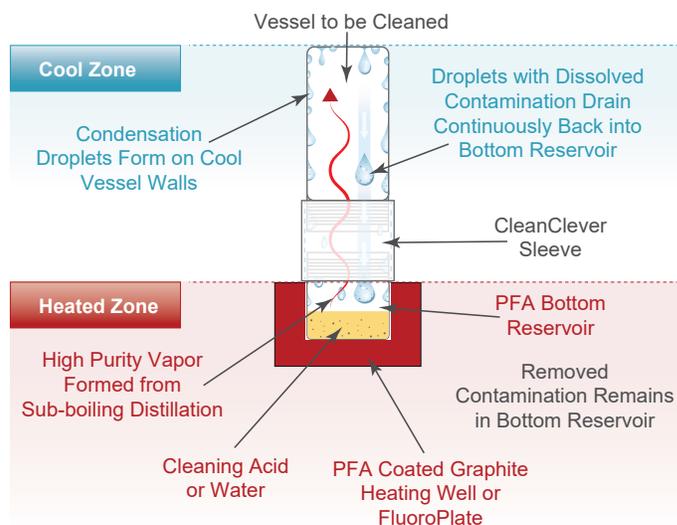
- Generates high-purity acid and water vapors from reagent-grade materials, which reduces operating costs
- Each CleanClever kit includes a PFA Bottom Reservoir and the customized CleanClever Sleeve
- Over 25 CleanClever Sleeves provide compatibility to many commercially available vials and bottles
- Heated with Analab FluoroPlate, CleanClever Wells on EvapoClean and CleanAcid systems or common hotplates

CleanClever Features Diagram



How it Works

- A small volume of reagent-grade acid is placed in PFA Bottom Reservoir which is then threaded into the CleanClever Sleeve
- The vessel to be cleaned is connected to the Sleeve and placed on a heating surface or well on a Analab FluoroPlate, EvapoClean or CleanAcids device
- The acid is heated to just below the boiling point, creating high-purity vapors which then condense on the walls of upper vessel
- Condensed acid vapors leach contamination out of internal surfaces and pores of the vessel, which drain down to the Bottom Reservoir in a continuous process
- The contents of the Bottom Reservoir can be replaced with DI water and the process continued with the condensing steam rinsing the vessel walls



CleanClever Systems

The following table lists the CleanClever systems and the vessels they are compatible with for acid vapor cleaning. Also provided is information on the Analab heating devices – FluoroPlate, EvapoClean, CleanAcids – with details regarding bottom reservoir heating and well compatibility.



Closeup view of CleanClever in heating well

Model	Bottom Reservoir	Heating/Well Compatibility	Vessel Closure	Compatibility – PFA Vessel for Cleaning ESI P/Ns
CleanClever 1	PFAJ-100 / 100 mL	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	GL45	Bottles* V-70-0360/500 mL
CleanClever 3	PFAJ-100 / 100 mL	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	43 mm	Wide Neck Bottles* V-50-0360/100 mL
CleanClever 4	PFAJ-100 / 100 mL	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	32 mm	Vials V-31-15x/15 mL V-31-30/30 mL – <i>Analab vessel kit 25 mL</i> V-31-60x/60 mL
CleanClever 5	350 mL Jar*	FluoroPlate	110 mm	Wide Mouth Bottle*
CleanClever 6	PFAJ-100 / 100 mL	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	53 mm	Jars, Conical Interior PFAJ-100/100 mL <i>Analab vessel kit 125 mL</i>

Model	Bottom Reservoir	Heating/Well Compatibility	Vessel Closure	Compatibility – PFA Vessel for Cleaning ESI P/Ns
CleanClever 7	V-31-30 / 30 mL	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	32 mm	Vials V-31-15x/15 mL V-31-30/30 mL – <i>Analab vessel kit 25 mL</i> V-31-60x/60 mL
CleanClever 8	PFAJ-100 / 100 mL	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	38 mm	Standard Acid Bottles EBP0125/125 mL EBP0250/250 mL EBP0500/500 mL EBP1000/1000 mL
CleanClever 11	PFAJ-100 / 100 mL	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	GL18	Volumetric Flasks (10/25/50/100 mL)*
CleanClever 12	PFAJ-100 / 100 mL	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	GL25	Volumetric Flask (250 mL)*
CleanClever 13	PFAJ-100 / 100 mL	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	53 mm	Bottle (500 mL)*
CleanClever 15	PFAJ-100 / 100 mL	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	GL32	Bottle (250/500 mL)*
CleanClever 18	PFAJ-100 / 100 mL	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	48 mm	Wide Mouth Bottle (500 mL)*
CleanClever 19	PFAJ-100 / 100 mL	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	53 mm	Wide Mouth Bottle (1000 mL)*
CleanClever 23	V-31-30 / 30 mL	FluoroPlate	24 mm	Mini Vial* V-22-0315/5 mL
CleanClever 24	PFAJ-100 / 100 mL	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	70 mm	Standard Jar (240 mL)*
CleanClever 25	PFAJ-100 / 100 mL	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	57 mm	Bottle* <i>Analab vessel kit 500 mL</i>

*Contact ESI directly for information if you do not see your vessels listed on the chart.



Analab – Your Source for High Purity Sample Preparation



FluoroPlate



EasyTrace CRD



FluoroBloc



CleanClever



EvapoClean



P'Tips Cleaner



CleanAcids