

ANALAB® CleanClever

Individual Vessel Acid Vapor Cleaning

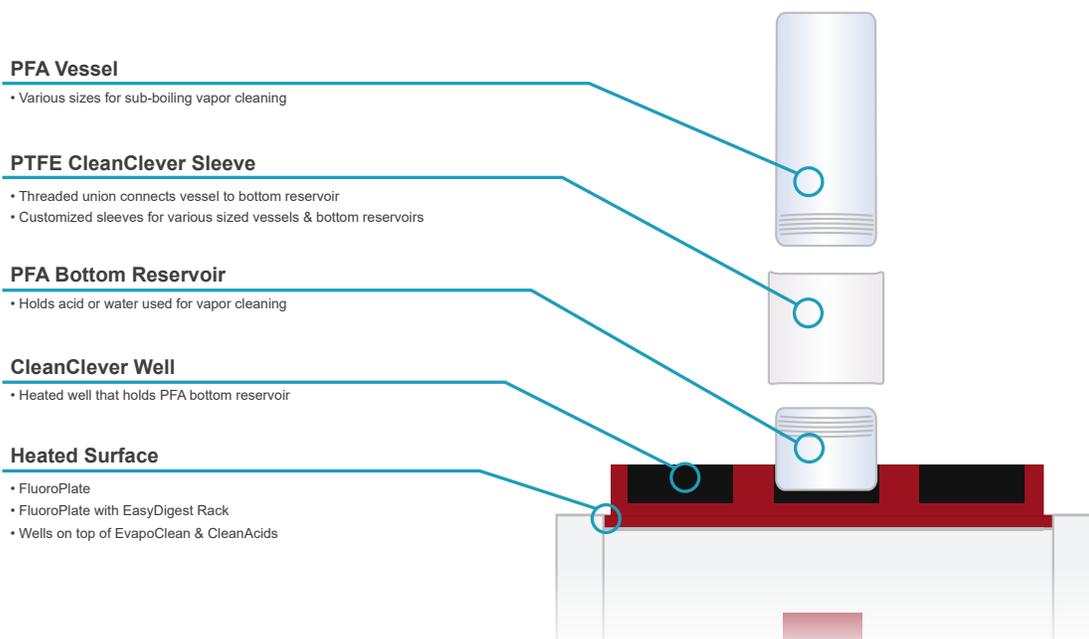


The CleanClever vapor cleaning system utilizes small volumes of acid and water to quickly clean a wide variety of vials and bottles for ultra-trace metal analysis. This highly flexible system provides a safe, simple, and effective method for removing contamination from PFA, PTFE, and glass vessels.

Cleaner Vessels = Better Results

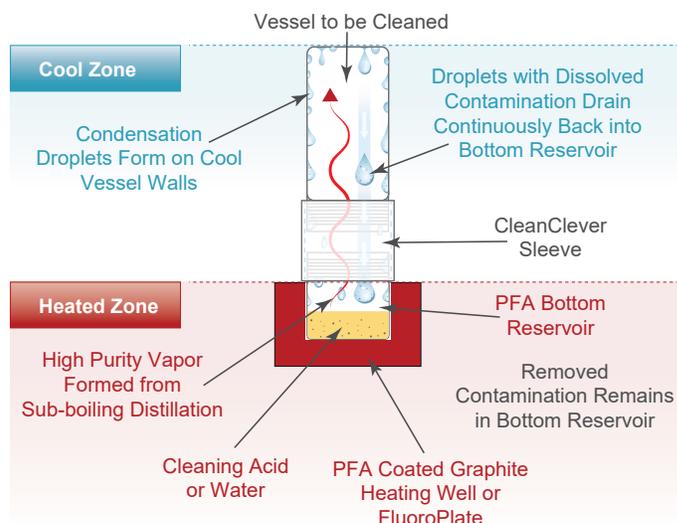
- Generates high-purity acid and water vapors from reagent-grade materials, which reduces operating costs
- Each CleanClever kit includes a PFA Bottom Reservoir and the customized CleanClever Sleeve
- Over 25 CleanClever Sleeves provide compatibility to many commercially available vials and bottles
- 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			
				AHF	Savillex	Nalgene	Other
CleanClever 1	AHF 100 mL T44-410	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	GL45	Bottles T82-500/500 mL T82-001/1000 mL	Bottles 150-01-0100/100 mL 150-01-0250/250 mL 150-01-0500/500 mL 150-01-1000/1000 mL		Sanplatec Bottles 30703/500 mL 30704/1000 mL
CleanClever 3	AHF 100 mL T44-410	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	43 mm	Wide Neck Bottles T84-250/250 mL T84-100/100 mL		Wide Mouth Bottle 2100-0008/250 mL	Sanplatec Bottles 18109/250 mL 18113/250 mL 18108/100 mL 18112/100 mL ESI Bottle V-50-0360
CleanClever 4	AHF 100 mL T44-410	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	32 mm	Vials T46-410/15 mL T46-425/30 mL <i>Analab vessel kit 25 mL</i> T46-450/60 mL	Vials 200-015-xx/15 mL 200-022-xx/22 mL 200-030-xx/30 mL Impinger Tube 201-060-12-033-xx/60 mL Digestion Tubes 210-010-30/10 mL 210-017-20/17 mL 210-025-30/25 mL		ESI Vials V-31-15 V-31-15F V-31-30 V-31-60 V-31-60F
CleanClever 5	Savillex 350 mL 100-0350-01	FluoroPlate	110 mm		Bottles 100-1000-01/1000 mL 100-2000-01/2000 mL <i>Analab vessel kit 1000 mL</i>		

CleanClever Systems table continued on next page

Compatibility – PFA Vessel for Cleaning

Model	Bottom Reservoir	Heating/Well Compatibility	Vessel Closure	Compatibility – PFA Vessel for Cleaning			
				AHF	Savillex	Nalgene	Other
CleanClever 6	AHF 100 mL T44-410	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	53 mm	Jars, Conical Interior T44-410/100 mL T44-418/180 mL <i>Analab vessel kit 125 mL</i>	Standard Jars 100-0060-01/60 mL 100-0090-01/90 mL 100-0180-01/180 mL		ESI Jars PFAJ-100 T-44-418
CleanClever 7	AHF 30 mL T46-425	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	32 mm	Vials T46-410/15 mL T46-425/30 mL <i>Analab vessel kit 25 mL</i> T46-450/60 mL	Vials 200-015-xx/15 mL 200-022-xx/22 mL 200-030-xx/30 mL Impinger Tube 201-060-12-033-xx/60 mL Digestion Tubes 210-010-30/10 mL 210-017-20/17 mL 210-025-30/25 mL		
CleanClever 8	AHF 100 mL T44-410	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	38 mm			Narrow Mouth Bottles 1630-0004/125 mL 1630-0008/250 mL 1630-0016/500 mL 1630-0032/1000 mL	
CleanClever 11	AHF 100 mL T44-410	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	GL18	Volumetric Flasks T47-010/10 mL T47-025/25 mL T47-050/50 mL T47-100/100 mL			Vitlab Vol Flasks 107097/10 mL 107197/25 mL 107297/50 mL 107397/100 mL
CleanClever 12	AHF 100 mL T44-410	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	GL25	Volumetric Flask T47-250/250 mL			
CleanClever 13	AHF 100 mL T44-410	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	53 mm				Tamapure Bottle 500 mL
CleanClever 15	AHF 100 mL T44-410	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	GL32				Cole-Parmer Bottles WW-06052-92/250 mL WW-06052-93/500 mL
CleanClever 18	AHF 100 mL T44-410	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	48 mm			Wide Mouth Bottle 2100-0016/500 mL	
CleanClever 19	AHF 100 mL T44-410	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	53 mm			Wide Mouth Bottle 2100-0032/1000 mL	
CleanClever 23	AHF 30 mL T46-326	FluoroPlate	24 mm	Mini Vial T44-207/7 mL	Standard Vial 200-007-xx/7 mL		
CleanClever 24	AHF 100 mL T44-410	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	70 mm		Standard Jar 100-0240-01/240 mL		
CleanClever 25	AHF 100 mL T44-410	FluoroPlate, EvapoClean 3x125, 6x125, 12x125 CleanAcids 3x125, 3x500	57 mm	Bottle T84-500/500 mL <i>Analab vessel kit 500 mL</i>			

Analab – Your Source for High Purity Sample Preparation



FluoroPlate



EasyTrace CRD



FluoroBloc



CleanClever



EvapoClean



P'Tips Cleaner



CleanAcids