

Vortex shearing motor requires no gas supply for operation.

Easy-to-use operation interface for time, temperature and end-point detection settings.

Built-in chiller for solvent recovery.

Endpoint sensors for 0.5 or 1 mL evaporation.



TurboVap® 500

Volume Range up to 500 mL

TurboVap® 500 can evaporate volumes up to 500 mL down to complete dryness with flat bottomed vessels or to a selectable endpoint at 0.5 or 1 mL. A water bath is used to maintain stable temperature, while the cooled glassware condenser collects the solvent. The condenser technology allows for efficient and cost effective collection of hazardous waste. It also prevents losses of samples and allows for analysis to detect cross-contamination issues.

Applications

In environmental laboratories, concentration of large samples is often a time consuming process. TurboVap® 500 efficiently concentrates organic solvent extracts to 0.5 or 1.0 mL and sounds an alarm when finished. This “load and leave” capability frees the analyst for more important work.

TurboVap 500 is also an excellent alternative to traditional rotary evaporators used in organic synthesis. With a 500 mL solvent capacity and water bath temperatures up to 95 °C, synthesis mixtures are processed quickly. The unique vortexing action maintains the components of interest in the solvent during evaporations and minimizes the “plating” of the compounds on the vessel walls. The open top cylindrical design of the sample tube, with a small stem at the bottom, provides an easy way to recover the products of interest when the evaporation is completed.

Advantages

- » Patented vortex shearing technology
- » Patented sensor endpoint detection
- » Operators are freed to perform other tasks, further improving lab productivity
- » No “bumping” means no re-working of samples, saving you money every week
- » Solvent vapor recovery system – laboratory emissions can be greatly reduced
- » User-friendly displays and diagnostics
- » Convenient bench top size – no hood space required
- » No need for fume hood
- » Portable – no gas required applications
- » Environmental samples
- » Agrochemical samples
- » Forensic and crime samples
- » Drugs of abuse samples
- » Food and beverage analysis
- » Pharmaceutical biotech compounds
- » Clinical samples
- » Remote locations

Specifications

Technology	Gas vortex shearing technology
Number of samples	2
Timer range	1 to 99 minutes
Max. sample volume	500 mL
Evaporation rate	Adjustable based on water bath temperature, fan speed and chiller or tap water temperature
Final endpoint volumes	Selectable. Automatic endpoints of 0.5 mL and 1.0 mL or dryness.
Solvent reclamation	95% of solvent vapors under typical conditions
Water bath temperature	Ambient to 95 °C (upper temperature with sensors is 60 °C)
Gas supply requirements	Internal fan, 4000–8000 rpm No external gas required
Exhaust	–
Minimum operating pressure	No gas required
Electrical supply	220–240 V~, 50 Hz, 5 A (UK & EU) 100–120 V~, 50/60 Hz, 10 A (USA & JP)
Max. power consumed	900 VA
Dimensions (WxDxH)	61 cm x 30.2 cm x 53.8 cm 24" x 11.9" x 21.2"
Weight	18.4 kg/40.5 lbs
Certifications	2006/95/EC Low Voltage Directive 2004/108/EC EMC Directive 93/68/EEC CE Marking Directive

Evaporation Rates

Solvent	Solvent volume (mL)	Bath temp. (°C)	Fan speed (rpm)	Chiller temp. (°C)	Approx. time (min.)
Dichloromethane	100	38	4000	6	15
	100	38	6000	6	10
	100	38	8000	6	7
	180	38	4000	6	37
	180	38	6000	6	25
Hexane	50	58	6000	6	4
	100	58	6000	6	7
	180	58	6000	6	13
	500	58	6000	6	33
Methanol	100	58	6000	6	25
Acetone	100	56	6000	6	12
Acetonitrile	100	58	6000	6	23
Acetone/hexane (50:50)	100	58	6000	6	9
Water	100	75	8000	6	100
Methanol/water (50:50)	100	58	8000	6	43