



MANUALLY CONTROLLED NITROGEN BLOWDOWN EVAPORATORS



Microplate evaporators

Porvair evaporators are designed to remove the traditional laboratory 'bottleneck' of solvent evaporation from microplates prior to analysis or reconstitution in storage buffer. These evaporators give significant throughput advantages to laboratories looking to optimise microplate sample preparation productivity. Faster than centrifugal evaporation, significant increases in sample throughput are achieved through advanced evaporator head technology and an innovative manifold design, which directly injects heated nitrogen into each individual well of the microplate simultaneously. The evaporators have been designed to be simple to install, operate and maintain. Installation requires only connection to a gas supply or cylinder and mains electricity. Safety of operation is ensured as the CE marked compact units fit into all fume cupboards. Not suitable for high boiling solvents such as DMSO and water.

Both MiniVap® and MiniVap® Gemini may be operated with a supply of clean, dry compressed air in place of nitrogen, if the chemistry allows. An in-line gas filter must be used in this case.

MiniVap®

A DANGER HOT

The MiniVap® is purpose designed for low usage research and development departments where low numbers of individual plates or vials need drying. The MiniVap® is simple to operate and maintain. Installation requires only connection to a gas supply and standard mains socket. With manual control of the needle depth, gas temperature and flow rate, it allows fine control and quicker drying times than other standard methods.

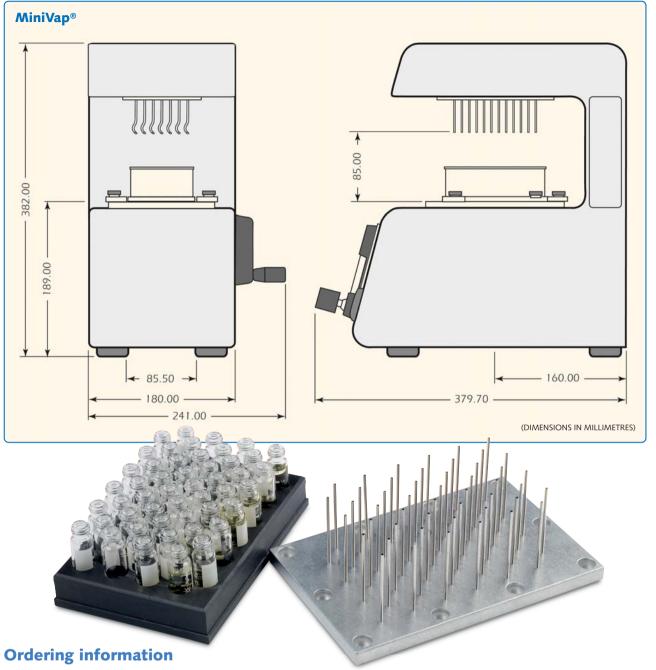
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MiniVap® 229206 with 229409 head

- Quicker dry down times than standard methods such as vacuum oven
- Tests have shown that the MiniVap® can evaporate 500µl of methanol in less than 6 minutes
- Designed for any ANSI/SLAS 96-well plate
- 24 vial head now available
- Simple to install and operate
- Easy adjustments of temperature, gas flow rates and needle depth into the wells
- Compact footprint fits all standard fume cupboards



Description	Qty/pack	Cat. no.
Blowdown Evaporator MiniVap® (110/230 volts), without a head	1	229206
96 Needle Head with spiral needles for all Porvair evaporators	1	229072
96 Needle Head with straight needles for all Porvair evaporators	1	229036
384 Needle Head with straight for Ultravap® RC. Mistral & Levante only	1	229073
24 Needle Head with straight for all Porvair evaporators	1	229409
Dedicated 48 Needle Head straight for use with HPLC vial adaptor for all Porvair evaporators	1	229410
12 Needle Head, 48mm straight for all Porvair evaporators, with gasket	1	229414
12 Needle Head, 38mm straight for all Porvair evaporators, with gasket		229415
Gasket for Needle Head manifold, for all Porvair evaporators		229048
Vial adaptor for 48 x 1.5 ml HPLC vials (Agilent/Chromacol etc.) black polypropylene	1	500109
24-well 12 mm i.d. Vial Holder for solid aluminium, for all Porvair evaporators	1	229650
Disposable plastic vial rack with clear bottom for 13.75mm o.d. glass vials x 24	5	229216



A two-position nitrogen blowdown concentrator and evaporator for the budget-conscious laboratory

Porvair nitrogen blowdown evaporators have for many years been a central resource for sample preparation in the laboratory. The ability to safely and easily remove organic and chromatographic solvents from samples is vitally important. Samples can be dried down and re-constituted in a more suitable solvent, or they may simply be concentrated before analysis to increase sensitivity.

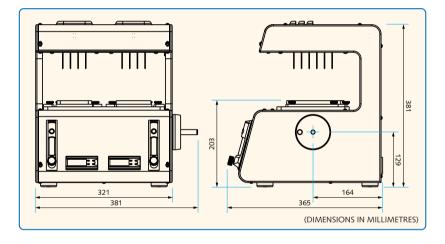
The nitrogen blowdown process is ideal for lower boiling point organic solvents such as methanol, dichloromethane, hexane and acetonitrile. The robust design of the MiniVap® Gemini brings together for the first

time in our range two individually temperature-regulated evaporation positions with a wide choice of head styles and configurations. This means you can dry down a 96-well deep well plate at the same time as 48 HPLC vials. This breakthrough in productivity will speed up the evaporation bottleneck in your laboratory, increase the sensitivity of your analyses and quicken sample processing times.



Ordering information

Description	Qty/Pack	Cat. No.
MiniVap® Gemini Blowdown Evaporator (110/230 volts),		
without heads	1	500234



MiniVap® and MiniVap® Gemini Specification

Voltage	110v or 220v auto ranging power supply
Max current	10A
Heaters	Ambient to 60°C
Heater setting	Via TK-32 programmers (2)
Evaporation heads	MiniVap®: 1, MiniVap® Gemini: 2, interchangeable 24, 48, 96 straight or 96 spiral needles
Gas inlet	MiniVap®: 6mm. MiniVap® Gemini: 8mm i.d. QuickConnect
Gas pressure	Minimum 3bar, maximum 7bar

Gas control	One or two independent needle valve controls
Gas flow rate	Heaters inactive below 35I/min flow rate, max flow 70 L/min PER HEAD
Gas requirements	Supply at 3-7bar and up to 80L/Min (MiniVap®) 160L/Min (Gemini using both heads)
Vertical travel	80mm (depends on plate height)
Plate adjustment	Manual. Simultaneous for both plates (Gemini only)
Plate locators	One or two sets, individually adjustable

