

RapidVap® Evaporators

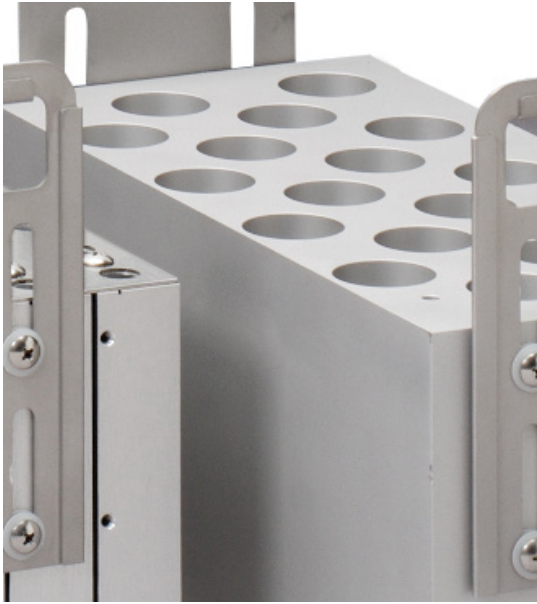




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Come to the forefront of analysis.

Sample preparation usually fades into the background. But scientific results are only as good as the equipment you use to produce your samples. As the most important step in scientific analysis, why let it hide in the weeds?

With Labconco's RapidVap® line, you can produce a high throughput of samples efficiently. No matter the volume, our evaporators ensure efficient production of multiple samples without compromising integrity. With repeatability you can count on.

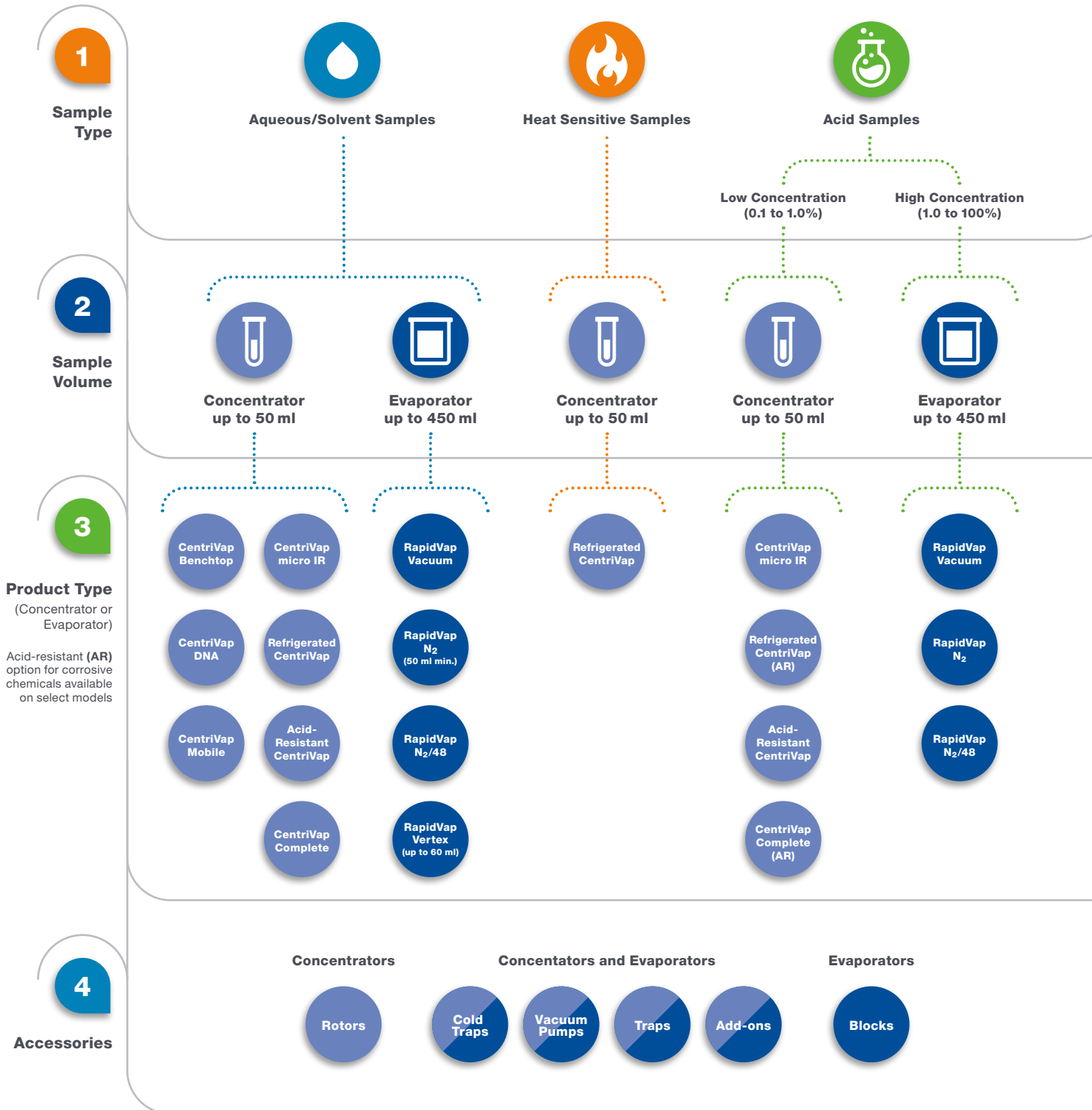
Choose from one of our four different benchtop, user-friendly RapidVap evaporator models using either vacuum or nitrogen blow down of the sample. No messy water baths.

Quality in. Quality out. Labconco has your back.



RapidVap® Evaporators

Steps to Selecting a Vacuum Concentrator or Evaporator



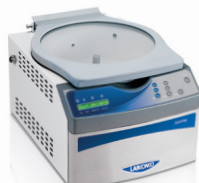
RapidVap® Evaporators

CentriVap® and RapidVap® Product Lines

CentriVap Centrifugal Vacuum Concentrators



micro IR



Benchtop



DNA



Acid-Resistant



Refrigerated



AR



Complete



AR



Mobile



RapidVap Evaporators



Vertex



Vacuum



N₂



N₂/48



Accessories



Rotors



Cold Traps



Vacuum Pumps



Traps



Add-ons



Blocks

RapidVap® Vertex™ Evaporators

Features & Benefits



LCD Display

Has touchscreen programming. Shows parameters for block, sample and time.

Nitrogen Control

Each switch controls nitrogen flow to one of five rows of nozzles, allowing nitrogen to be conserved during partial runs.

Pressure Regulator

Displays pressure from 0 to 45 psi.

Dry heat—no water bath

Dry heat has several advantages: less maintenance, no rust, no condensation and no potential source of cross contamination.

Microprocessor-controlled heater

Supplies heat to the block and is programmable from 30° C up to 100° C in 1 degree increments.

Nitrogen pressure regulator

Controls the pressure of nitrogen delivered to samples.

Temperature sensor

Monitors block or sample temperature.

Fast evaporation

With nitrogen blow down and heat.

Five rows of 10 nozzles

Deliver nitrogen to up to 50 samples at once.

Angled samples

Increases surface area for faster evaporation and optimized recovery.

Compact benchtop design

Small footprint fits in tight spaces.

Full one year warranty








RapidVap® Vertex™ Evaporators

Ordering Information



- Ideal for small sample volumes
- Multiple blocks for a variety of tube sizes
- Portable

| Catalog Number | Electrical Requirements | Receptacle & Plug Type | Overall Dimensions (w x d x h) | Shipping Weight |
|----------------|-------------------------|---|--------------------------------|-----------------|
| 7320020 | 115V, 60 Hz, 8A |  North America, 115V, NEMA 5-15P | 20.4" x 13.0" x 12.5" | 45 lbs. (16 kg) |
| 7320030 | 230V, 50/60 Hz, 4A |  Schuko | 20.4" x 13.0" x 12.5" | 45 lbs. (16 kg) |
| 7320035 | 230V, 50/60 Hz, 4A |  British (UK) | 20.4" x 13.0" x 12.5" | 45 lbs. (16 kg) |
| 7320037 | 230V, 50/60 Hz, 4A |  China/Australia | 20.4" x 13.0" x 12.5" | 45 lbs. (16 kg) |
| 7320040 | 230V, 50/60 Hz, 4A |  North America, 230V | 20.4" x 13.0" x 12.5" | 45 lbs. (16 kg) |

All models require (not included):

- Aluminum Block. See page 9
- Sample tubes. Contact your laboratory supply dealer.
- Nitrogen source with a flow rate of 6.5 CFM/185 LPM minimum. See page 23 for full requirements

RapidVap® Vertex™ Evaporators

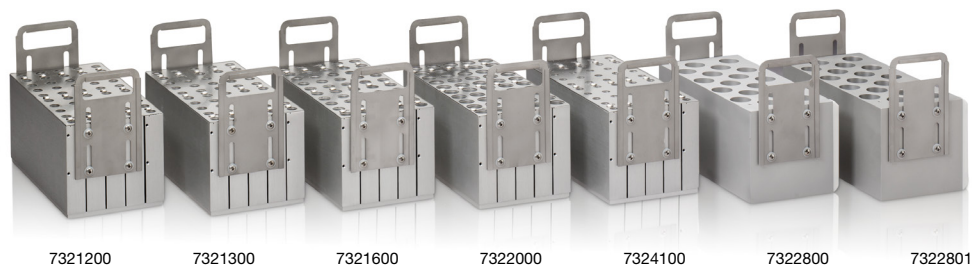
Evaporation Rates



| | Tube Size (mm) | Number of Samples | Sample Size (ml) | Temperature (° C) | N ₂ Pressure (psi) | Avg. Time to Dry (min) |
|--|----------------|-------------------|------------------|-------------------|-------------------------------|------------------------|
| Acetonitrile boiling point 82° C | 12 x 75 | 10 | 2 | 35 | 16 | <19 |
| | 12 x 75 | 10 | 2 | 45 | 16 | <15 |
| | 12 x 75 | 10 | 2 | 60 | 16 | <11 |
| | 12 x 75 | 10 | 2 | 80 | 16 | <8 |
| Methanol boiling point 65° C | 12 x 75 | 10 | 2 | 35 | 24 | <12 |
| | 12 x 75 | 10 | 2 | 45 | 24 | <10 |
| | 12 x 75 | 10 | 2 | 60 | 24 | <7 |
| | 12 x 75 | 10 | 2 | 80 | 24 | <6 |
| | 12 x 75 | 50 | 2 | 80 | 24 | <6 |
| | 20 x 150 | 10 | 10 | 52 | 37 | <42 |
| Water boiling point 100° C | 12 x 75 | 10 | 2 | 45 | 24 | <125 |
| | 12 x 75 | 10 | 2 | 60 | 24 | <80 |
| | 12 x 75 | 10 | 2 | 80 | 24 | <40 |
| | 12 x 75 | 10 | 2 | 100 | 24 | <25 |
| | 20 x 150 | 10 | 4 | 100 | 24 | <60 |
| | 20 x 150 | 50 | 4 | 100 | 24 | <64 |
| Toluene boiling point 111° C | 12 x 75 | 10 | 2 | 35 | 16 | <24 |
| | 12 x 75 | 10 | 2 | 45 | 16 | <18 |
| | 12 x 75 | 10 | 2 | 60 | 16 | <13 |
| | 12 x 75 | 10 | 2 | 80 | 16 | <9 |
| Methylene Chloride boiling point 40° C | 12 x 75 | 10 | 2 | 35 | 20 | <8 |
| | 12 x 75 | 10 | 2 | 45 | 22 | <7 |
| | 12 x 150 | 10 | 10 | 38 | 37 | <22 |
| Hexane | 20 x 150 | 10 | 10 | 52 | 37 | <11 |
| Ethyl Acetate | 20 x 150 | 10 | 10 | 52 | 37 | <22 |

RapidVap® Vertex™ Evaporators

Accessories



Aluminum Blocks. All RapidVap Vertex Evaporators require a Block (not included). Blocks of solid aluminum include stainless steel handles to lift the block in and out of the evaporator. A 0.21" (0.5 cm) dia. port in the upper left hand corner of the block is provided for insertion of the temperature probe to monitor upper block temperature. Select a block that closely matches the outside diameter of your sample container. Custom blocks to fit special glassware are available upon request. **Glassware is required (not included).**

| Catalog Number | Tube Capacity | Tube Volume | Tube Description | Shipping Weight |
|-------------------------|---------------|-------------|-------------------------------------|-----------------|
| 7324100 | 50 | 3 ml | 10 mm x 75 mm, tubes | 26 lbs. (12 kg) |
| 7321200 | 50 | 5 ml | 12 mm x 75 mm, tubes | 26 lbs. (12 kg) |
| 7321300 | 50 | 8 ml | 13 mm x 100 mm, tubes | 24 lbs. (11 kg) |
| 7321601 | 50 | 12 ml | 16 mm x 100 mm, tubes | 19 lbs. (9 kg) |
| 7321600 | 50 | 16 ml | 16 mm x 125 mm, tubes | 21 lbs. (10 kg) |
| 7322000 | 50 | 30 ml | 20 mm x 150 mm, tubes | 15 lbs. (7 kg) |
| 7322800 | 18 | 40 ml | 28 mm x 95 mm, ASE vials | 22 lbs. (10 kg) |
| 7322801 | 18 | 60 ml | 28 mm x 140 mm, ASE vials | 19 lbs. (9 kg) |
| 7324600 | 50 | 1 ml | 1.5 ml microcentrifuge tubes | 33 lbs. (15 kg) |
| 7322300 | 50 | 12 ml | 17 mm x 125 mm, 15 ml conical tubes | 33 lbs. (15 kg) |

RapidVap® Vacuum Evaporators

Features & Benefits



1000-watt dry block heating system

Speeds evaporation rate by supplying a controlled amount of heat from ambient up to a maximum of 100° C to the sample block. Heater and block move in tandem for more efficient heat transfer. Unlike water baths, the dry heating system adds no potential source of contamination and requires no maintenance.

Faster evaporation rates, greater throughput

Vortex action, heat and vacuum combine to accelerate evaporation.

Phenol-free gasket

Provides complete sealing under vacuum.

Automatic vacuum release

Vacuum is released in the event of power failure.

PTFE*-coated sample block

Provides chemical resistance (sold separately).

PTFE*-coated chamber

Aluminum with PTFE for a broad range of chemical compatibility.

Microprocessor-controlled vortex motion increases surface area for faster evaporation

Vortex action continually mixes sample, helps contain analytes in the solvent, minimizes bumping and maximizes sample recovery. It also performs a time-saving function in resuspension and solvent exchange procedures.

Audible/visual alarms

Signal completion of run allowing samples to be left unattended while evaporating to desired end point.

Dual lid clamps

Two clamps hold the lid securely in place for a vacuum tight seal.

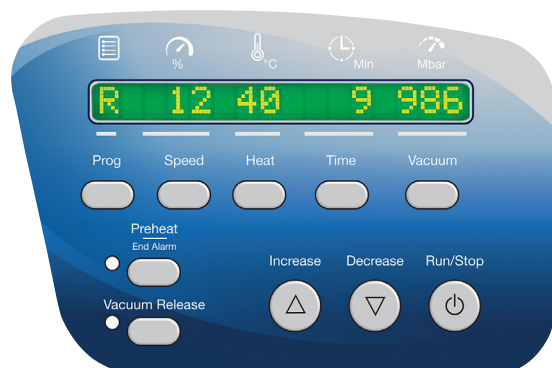
Glass lid with polycarbonate shield

Chemical-resistant and detaches for cleaning.

Microprocessor-controlled vacuum level

Controls vacuum level at a present level to speed evaporation.

Full one year warranty



Program

LCD shows program from 1 to 9, R for run or S for stop.

Speed

LCD shows vortex speed from 0 to 100%.

Heat

LCD shows heat from OFF to 99 (° C) or HI (100° C).

Vacuum

LCD shows vacuum level from 0 to 999 mBar.

Vacuum Release Button

Press to momentarily break the vacuum to control bumping. Vacuum returns to preset level once button is released.

*Polytetrafluoroethylene



RapidVap® Vacuum Evaporators

Ordering Information



- Small to moderate sample volumes
- Moderate to large sample throughput
- Optional lid heater to eliminate solvent condensation

| Catalog Number | Built-In Option(s) | Electrical Requirements | Receptacle & Plug Type | Overall Dimensions (w x d x h) | Shipping Weight |
|----------------|--------------------------|-------------------------|--------------------------|--------------------------------|------------------|
| 7900000 | | 115V, 50/60 Hz, 16A* | North America, 115V, 20A | 20.7" x 18.4" x 13.5" | 100 lbs. (45 kg) |
| 7900002 | Lid Heater | 115V, 50/60 Hz, 16A* | North America, 115V, 20A | 20.7" x 18.4" x 13.5" | 100 lbs. (45 kg) |
| 7900010 | RS-232 Link | 115V, 50/60 Hz, 16A* | North America, 115V, 20A | 20.7" x 18.4" x 13.5" | 100 lbs. (45 kg) |
| 7900012 | Lid Heater & RS-232 Link | 115V, 50/60 Hz, 16A* | North America, 115V, 20A | 20.7" x 18.4" x 13.5" | 100 lbs. (45 kg) |
| 7900001† | | 230V, 50/60 Hz, 8A** | Schuko, 230V, 15A | 20.7" x 18.4" x 13.5" | 100 lbs. (45 kg) |
| 7900003† | Lid Heater | 230V, 50/60 Hz, 8A** | Schuko, 230V, 15A | 20.7" x 18.4" x 13.5" | 100 lbs. (45 kg) |
| 7900011† | RS-232 Link | 230V, 50/60 Hz, 8A** | Schuko, 230V, 15A | 20.7" x 18.4" x 13.5" | 100 lbs. (45 kg) |
| 7900013† | Lid Heater & RS-232 Link | 230V, 50/60 Hz, 8A** | Schuko, 230V, 15A | 20.7" x 18.4" x 13.5" | 100 lbs. (45 kg) |

All models require (not included):

- Vacuum Pump. See page 19
- Sample Block. See page 18
- Glassware. See page 18 or contact your laboratory supply dealer
- Secondary Trap. See pages 19-20

RapidVap Vacuum Evaporators should be located within a fume hood if hazardous or flammable solvents are used. In all cases, regardless of the solvent used, it is recommended that the vacuum pump be vented in a fume hood.

*System amperage shown includes 8 amp maximum vacuum pump rating. ** System amperage shown includes 4.5 amp maximum vacuum pump rating.
†International electrical configuration.

RapidVap® N₂ and N₂/48 Evaporators

Features & Benefits



1000-watt dry block heating system

Speeds evaporation rate by supplying a controlled amount of heat from ambient up to a maximum of 100° C to the sample block. Heater and block move in tandem for more efficient heat transfer. Unlike water baths, the dry heating system adds no potential source of contamination and requires no maintenance.

Faster evaporation rates, greater throughput

Vortex action, heat and nitrogen blow down combine to accelerate evaporation.

Phenol-free gasket

Provides complete sealing under vacuum.

PTFE*-coated sample block

Provides chemical resistance (included with N₂ models).

Microprocessor-controlled nitrogen blow down manifold

Nitrogen helps facilitate phase change from liquid to gas.

PTFE*-coated chamber

Aluminum with PTFE for a broad range of chemical compatibility.

Microprocessor-controlled vortex motion increases surface area for faster evaporation

Vortex action continually mixes sample, helps contain analytes in the solvent by constantly rinsing tube walls and maximizes sample recovery.

Unique Cool-Zone™ on RapidVap N₂

Insulates sample remaining in glassware stem to permit desired end point.

Audible/visual alarms

Signal completion of run allowing samples to be left unattended while evaporating to desired end point.

Dual lid clamps

Two clamps hold the lid securely in place.

Glass lid

Chemical-resistant and detaches for cleaning.

Microprocessor-controlled motor

Maintenance-free, brushless DC motor ensures safety and reproducibility for protocols.

Full one year warranty



Program

LCD shows program from 1 to 9, R for run or S for stop.

Speed

LCD shows vortex speed from 0 to 100%.

Heat

LCD shows heat from OFF to 99 (° C) or HI (100° C).

Time

LCD shows time selected from 1 to 999 minutes.

Sample

LCD shows number of sample or clusters of samples selected to receive nitrogen blow down; 2, 4, 6 or 8.

*Polytetrafluoroethylene



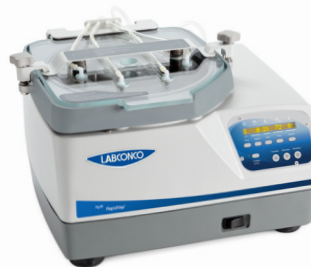
RapidVap® N₂ and N₂/48 Evaporators

Ordering Information



- Moderate sample throughput
- End-point determination
- Introduce nitrogen to tubes in sets of two
- Eight tube capacity

RapidVap N₂ Evaporator



- Small to moderate sample throughput
- Ideal for volatile samples
- Introduce nitrogen in clusters of six
- 48 tube capacity

RapidVap N₂/48 Evaporator

RapidVap N₂ Evaporators

| Catalog Number | Built-In Option | Electrical Requirements | Receptacle & Plug Type | Overall Dimensions (w x d x h) | Shipping Weight |
|----------------|-----------------|-------------------------|--------------------------|--------------------------------|------------------|
| 7910000 | | 115V, 50/60 Hz, 9A | North America, 115V, 20A | 21.7" x 19.0" x 13.5" | 107 lbs. (49 kg) |
| 7910010 | RS-232 Link | 115V, 50/60 Hz, 9A | North America, 115V, 20A | 21.7" x 19.0" x 13.5" | 107 lbs. (49 kg) |
| 7910001* | | 230V, 50/60 Hz, 4.5A | Schuko, 230V, 15A | 21.7" x 19.0" x 13.5" | 107 lbs. (49 kg) |
| 7910011* | RS-232 Link | 230V, 50/60 Hz, 4.5A | Schuko, 230V, 15A | 21.7" x 19.0" x 13.5" | 107 lbs. (49 kg) |

All models require (not included):

- Glassware. See pages 21-22
- Nitrogen source with flow rate of 0.6 CFM/17 LPM minimum. See page 22 for Nitro 2LV Nitrogen Generator or contact your nitrogen gas supplier.
- Gas pressure regulator. Pressure of 5-10 psi is typical. Pressure must not exceed 20 psi. Contact a local supplier.

RapidVap N₂/48 Evaporators

| Catalog Number | Built-In Option | Electrical Requirements | Receptacle & Plug Type | Overall Dimensions (w x d x h) | Shipping Weight |
|----------------|-----------------|-------------------------|--------------------------|--------------------------------|------------------|
| 7910012 | | 115V, 50/60 Hz, 9A | North America, 115V, 20A | 21.7" x 19.0" x 13.5" | 108 lbs. (49 kg) |
| 7910014 | RS-232 Link | 115V, 50/60 Hz, 9A | North America, 115V, 20A | 21.7" x 19.0" x 13.5" | 108 lbs. (49 kg) |
| 7910013* | | 230V, 50/60 Hz, 4.5A | Schuko, 230V, 15A | 21.7" x 19.0" x 13.5" | 108 lbs. (49 kg) |
| 7910015* | RS-232 Link | 230V, 50/60 Hz, 4.5A | Schuko, 230V, 15A | 21.7" x 19.0" x 13.5" | 108 lbs. (49 kg) |

All models require (not included):

- Sample Block. See page 21
- Glassware. See pages 18 and 21
- Nitrogen source with flow rate of 3.5 CFM/100 LPM minimum. See page 22 for Nitro 2LV Nitrogen Generator or contact your nitrogen gas supplier.
- Gas pressure regulator. Pressure of 5-10 psi is typical. Pressure must not exceed 20 psi. Contact a local supplier.

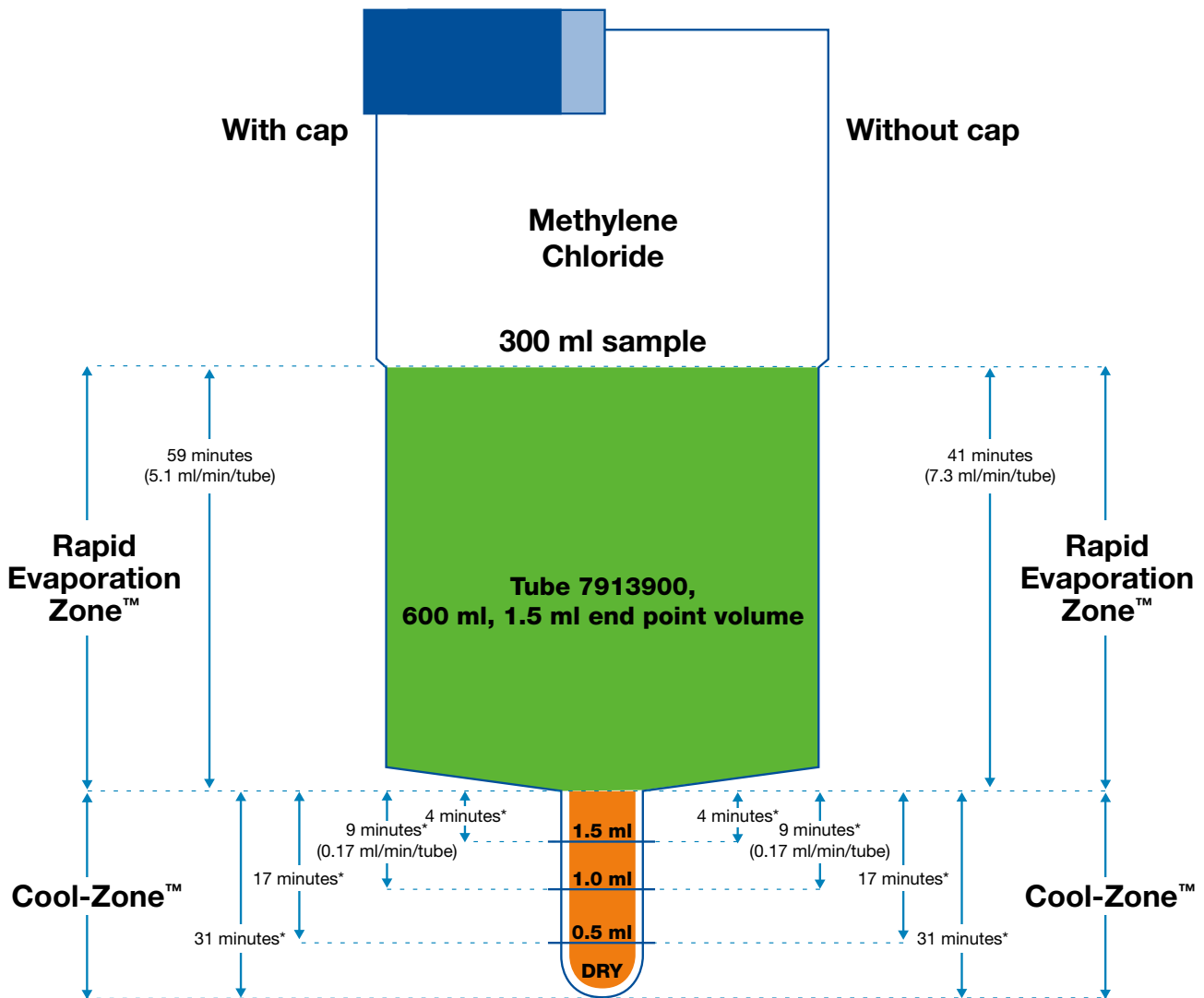
*International electrical configuration.

RapidVap® N₂ Evaporators

Rapid Evaporation Zone™ & Cool-Zone™

This illustration demonstrates the effectiveness of the Rapid Evaporation Zone and Cool-Zone in RapidVap N₂ models. In the Rapid Evaporation Zone, a 300 ml sample of methylene chloride is evaporated in 41 minutes at approximately 7.3 ml/minute/tube (without cap). In the Cool-Zone with vortex motion, heat and nitrogen blow down still applied, methylene chloride is evaporated

to a 1.0 ml end point in 9 minutes at a much slower rate, approximately 0.11 ml/minute/tube. If the RapidVap is programmed for timed end point, all functions automatically turn off when time expires, drastically slowing the evaporation rate. While samples are in the Cool-Zone, the user has ample time to retrieve samples or to perform solvent exchange procedures.



Number of samples: 8
 Nitrogen pressure: 10 psi
 Vortex speed: 70%
 Temperature: 40° C

RapidVap® Vacuum Evaporators

Evaporation Rates

| Solvent | Temperature | Vacuum | Overall Evaporation Rate |
|--------------------|-------------|----------|--------------------------|
| Methylene Chloride | 50° C | 200 mBar | 0.56 ml/min./tube |
| Toluene | 80° C | 200 mBar | 0.40 ml/min./tube |
| Acetonitrile | 75° C | 330 mBar | 0.40 ml/min./tube |
| Water | 80° C | 133 mBar | 0.08 ml/min./tube |

Number of samples: 69

Tube diameter: 16 mm

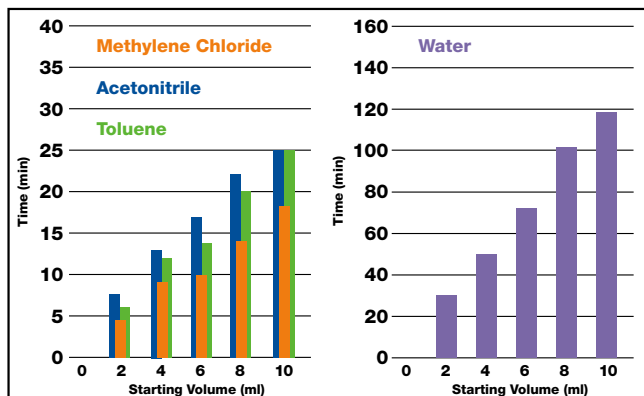
Block used: 7491400, 69 tube capacity

Ending volume: Dryness

Vortex speed: 95%

Vacuum pump displacement capacity: 88 L/min

Maximum attainable vacuum: 31 mBar



| Solvent | Temperature | Vacuum | Overall Evaporation Rate |
|--------------------|-------------|----------|--------------------------|
| Methylene Chloride | 50° C | 200 mBar | 4.8 ml/min/tube |
| Toluene | 80° C | 133 mBar | 3.3 ml/min/tube |
| Acetonitrile | 75° C | 167 mBar | 2.9 ml/min/tube |
| Water | 80° C | 133 mBar | 0.75 ml/min/tube |

Number of samples: 8

Tube used: 7909200, 600 ml tube, flat bottom, 75 mm diameter

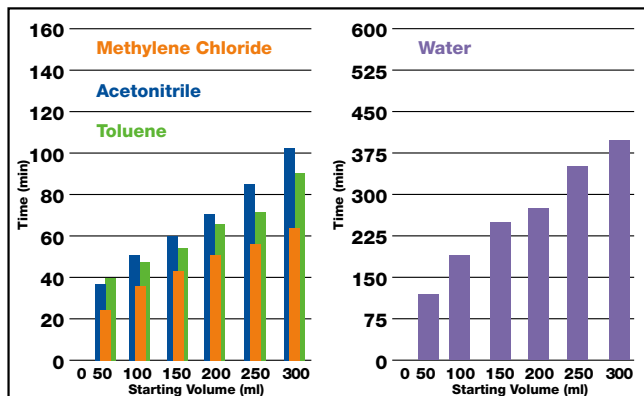
Block used: 7494500, 8 tube capacity

Ending volume: Dryness

Vortex speed: 28%

Vacuum pump displacement capacity: 88 L/min

Maximum attainable vacuum: 31 mBar

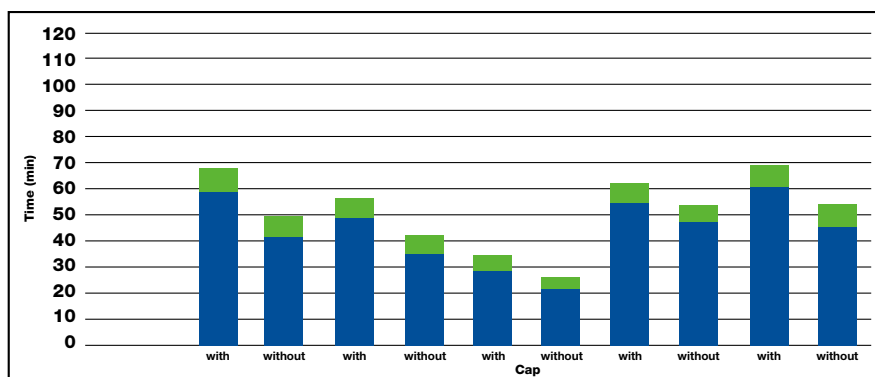
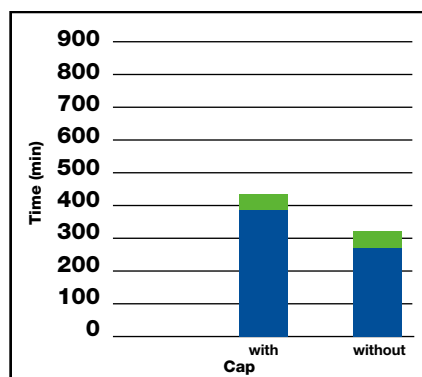


RapidVap® N₂ Evaporators

Evaporation Rates

The charts on this page indicate the evaporation times for the Rapid Evaporation Zone and the Cool-Zone. Times were determined with and without glassware caps over the sample tubes. Placing glassware caps over the sample tubes prevents contamination and prevents moisture from condensing in low boiling point solvents. The use of caps increases overall evaporation time from 10 to 80 percent. See page 22 for Glassware Caps.

| Solvent | Evaporation Rate with cap | Evaporation Rate without cap |
|--------------------|---------------------------|------------------------------|
| Water | 0.79 ml/min/tube | 1.1 ml/min/tube |
| Methylene Chloride | 5.1 ml/min/tube | 7.3 ml/min/tube |
| Ethyl Acetate | 6.3 ml/min/tube | 8.6 ml/min/tube |
| Hexanes | 10.3 ml/min/tube | 14.3 ml/min/tube |
| Acetone | 5.6 ml/min/tube | 6.4 ml/min/tube |
| Toluene | 5.0 ml/min/tube | 6.7 ml/min/tube |



| Cap | with | without |
|--|--------------|---------|
| Solvent | Water | |
| Block Set Point Temperature | 95° C | |
| Rapid Evaporation Zone Time (min) | 379 | 266 |
| Cool-Zone Time (min) | | |
| 1.5 ml* | 23 | 23 |
| 1.0 ml* | 43 | 43 |
| 0.5 ml* | 75 | 75 |
| Dry* | 120 | 120 |

| Cap | with | without | with | without | with | without | with | without | with | without |
|--|---------------------------|---------|----------------------|---------|----------------|---------|----------------|---------|----------------|---------|
| Solvent | Methylene Chloride | | Ethyl Acetate | | Hexanes | | Acetone | | Toluene | |
| Block Set Point Temperature | 40° C | | 75° C | | 70° C | | 55° C | | 100° C | |
| Rapid Evaporation Zone Time (min) | 59 | 41 | 48 | 35 | 29 | 21 | 54 | 47 | 60 | 45 |
| Cool-Zone Time (min) | | | | | | | | | | |
| 1.5 ml* | 4 | 4 | 4 | 4 | 2 | 2 | 3 | 3 | 5 | 5 |
| 1.0 ml* | 9 | 9 | 7 | 7 | 5 | 5 | 7 | 7 | 9 | 9 |
| 0.5 ml* | 17 | 17 | 13 | 13 | 8 | 8 | 12 | 12 | 15 | 15 |
| Dry* | 31 | 31 | 24 | 24 | 16 | 16 | 22 | 22 | 26 | 26 |

Number of samples: 8

Tube used: 7913900, 600 ml tube with 1.5 ml end point stem, 1.37" (3.5 cm) long

Starting volume: 300 ml

Ending volume: 1.0 ml

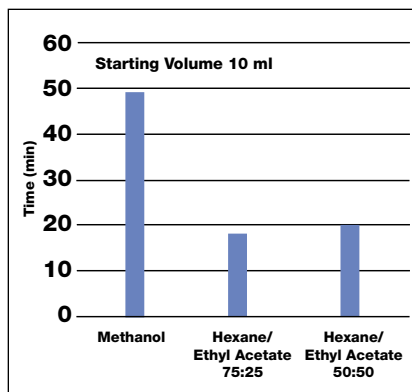
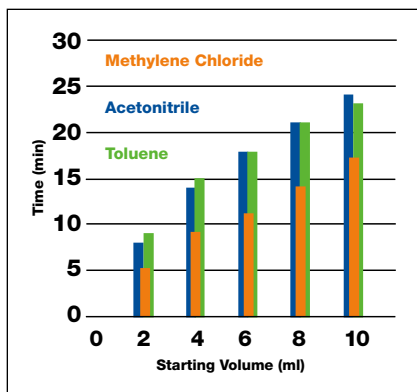
Nitrogen pressure: 10 psi

Vortex speed: 70% of maximum setting

*End point volume

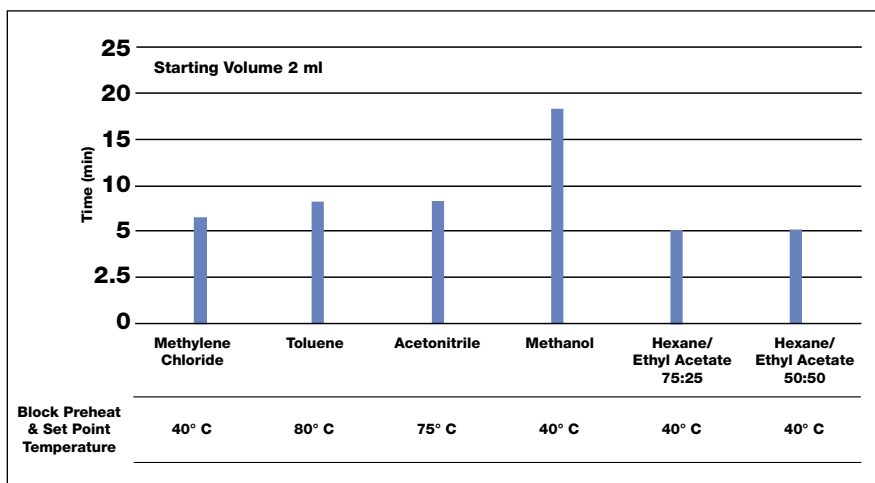
RapidVap® N₂/48 Evaporators

Evaporation Rates



Number of samples: 48
 Tube size: 20 mm
 Block used: 7482400, 48 tube capacity
 Ending volume: Dryness
 Nitrogen pressure: 20 psi
 Vortex speed: 100%

| Solvent | Temperature | Overall Evaporation Rate |
|----------------------------|-------------|--------------------------|
| Methylene Chloride | 50° C | 0.59 ml/min/tube |
| Toluene | 80° C | 0.43 ml/min/tube |
| Acetonitrile | 75° C | 0.42 ml/min/tube |
| Methanol | 40° C | 0.20 ml/min/tube |
| Hexane/Ethyl Acetate 75:25 | 40° C | 0.56 ml/min/tube |
| Hexane/Ethyl Acetate 50:50 | 40° C | 0.50 ml/min/tube |



Number of samples: 48
 Tube size: 12 mm
 Block used: 7482100, 48 tube capacity
 Ending volume: Dryness
 Nitrogen pressure: 8 psi
 Vortex speed: 100%

| Solvent | Temperature | Overall Evaporation Rate |
|----------------------------|-------------|--------------------------|
| Methylene Chloride | 40° C | 0.33 ml/min/tube |
| Toluene | 80° C | 0.25 ml/min/tube |
| Acetonitrile | 75° C | 0.25 ml/min/tube |
| Methanol | 40° C | 0.11 ml/min/tube |
| Hexane/Ethyl Acetate 75:25 | 40° C | 0.40 ml/min/tube |
| Hexane/Ethyl Acetate 50:50 | 40° C | 0.40 ml/min/tube |

Accessories

RapidVap Vacuum Evaporators



PTFE-Coated Aluminum Blocks. A block is required for all RapidVap Vacuum Evaporators. Blocks are interchangeable. Custom blocks to fit special glassware such as VOA vials are available on request. **Glassware is required (not included).** See below for ordering information on Flat-Bottom Tubes for Blocks 7494500 and 7186100. For glassware for all other Blocks, contact your laboratory supply dealer.

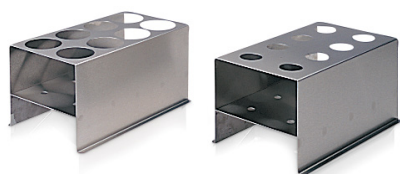
| Catalog Number | Block Tube Capacity | Sample Tube Size | Sample Volume** | Shipping Weight |
|----------------|---------------------|--|-----------------|-------------------|
| 7491300 | 110 | 12 mm OD tubes, up to 6 ml* | 4.5 ml | 8.0 lbs. (3.6 kg) |
| 7485800 | 110 | 13 mm OD tubes, up to 10 ml* | 7.5 ml | 8.0 lbs. (3.6 kg) |
| 7491400 | 69 | 16 mm OD tubes, up to 23 ml* | 17 ml | 7.4 lbs. (3.4 kg) |
| 7496300 | 69 | 15 ml conical centrifuge tubes, up to 15 ml* | 11 ml | 7.8 lbs. (3.5 kg) |
| 7496400 | 26 | 28 mm OD scintillation tubes, up to 50 ml* | 34 ml | 8.3 lbs. (3.8 kg) |
| 7494500 | 8 | 600 ml borosilicate glass tubes | 450 ml | 6.4 lbs. (2.9 kg) |
| 7486400 | 8 | 170 ml borosilicate glass tubes | 125 ml | 8.2 lbs. (3.7 kg) |

*Maximum tube height is 150 mm. ** Actual sample volumes depend on tube shape, height and vortex speed.



Flat-Bottom Tubes. Borosilicate glass tubes offer better fit and heat transfer for faster evaporation rates.

| Catalog Number | Sample Tube Size | Sample Volume | For Block | Quantity per Package | Shipping Weight |
|----------------|------------------|---------------|-----------|----------------------|-------------------|
| 7909200 | 600 ml | 450 ml | 7494500 | 1 | 1.0 lb. (0.4 kg) |
| 7913408 | 600 ml | 450 ml | 7494500 | 8 | 4.0 lbs. (1.8 kg) |
| 7927000 | 170 ml | 125 ml | 7486400 | 1 | 1.0 lb. (0.4 kg) |
| 7927108 | 170 ml | 125 ml | 7486400 | 8 | 4 lbs. (1.8 kg) |



Eight-Place Stainless Steel Racks. Hold tubes when loading and unloading RapidVap Vacuum Evaporator. **Tubes are not included.** Shipping weight 2.0 lbs. (0.9 kg)

| Catalog Number | Sample Tube Size |
|----------------|------------------|
| 7487600 | 600 ml |
| 7486300 | 170 ml |

7484300P—Glass Lid with Heater. For applications involving water or other high boiling point solvents, a Lid Heater improves visibility and eliminates solvent condensation. The glass lid, with 40-watt heater bonded to it, plugs into the RapidVap's rear electrical receptacle. For 115V or 230V operation. Shipping weight 0.5 lb. (0.2 kg)

Accessories

RapidVap Vacuum Evaporators



Diaphragm Vacuum Pumps. PTFE-coated wetted parts for corrosion resistance. Vacuum outlet is 1/2" OD. These pumps are not explosion-proof. Vacuum mBar: 1.5. Shipping weight 40 lbs. (18 kg)

| Catalog Number | Electrical Specifications | Displacement Capacity |
|-----------------|---------------------------|-----------------------|
| 7393000 | 115V, 60 Hz, 3.5A | 63 L/min |
| 7393001* | 230V, 50/60 Hz, 2A | 57/63** L/min |

*International electrical configuration. Power cord has reverse IEC plug. ** Displacement at 50/60 Hz.



7873400—Liquid Trap. Prevents liquid from entering the pump. Made of borosilicate glass. Trapping capacity is 2550 ml. Required accessory for Diaphragm Pump when using high boiling point solvents. Shipping weight 4.0 lbs. (1.8 kg)



Dry Ice Vacuum Traps. When dry ice and solvent are added to the well, these secondary traps cool to approximately -75° C (-103° F). Inlet and outlet vacuum connections are 1/2" OD.

| Catalog Number | Dimensions (dia. x h) | Well Volume of Ice and Alcohol | Ice Trapping Capacity | Liquid Trapping Capacity | Shipping Weight |
|----------------|-----------------------------------|--------------------------------|-----------------------|--------------------------|----------------------|
| 7538200 | 7 7/8" x 9 3/4" (20 x 24.8 cm) | 2.85 L | 900 ml | 2 L | 9.0 lbs. (4.1 kg) |
| 7538400 | 6 5/8" x 7 7/8" (16.8 x 20 cm) | 1.8 L | 200 ml | 1 L | 5.0 lbs. (2.3 kg) |



7348000—Trapping Valve. Aids in solvent recovery. Compatible with RapidVap Vacuum Evaporators manufactured after September 2016. Cold Trap is required (not included). See CentriVap Cold Traps on page 20. Shipping weight 8.0 lbs. (3.6 kg)

7814500—Vacuum Tubing Kit. For use when connecting accessory traps to a vacuum system. Includes two each 1/2" ID vacuum tubing, 48" length, and 4 tubing clamps. Shipping weight 6 lbs. (2.7 kg)

⚠ **WARNING:** Cancer — P65Warnings.ca.gov (California only)

Accessories

CentriVap® Cold Traps for Solvent Recovery with RapidVap Vacuum Evaporators



CentriVap -50° C Cold Trap



CentriVap -84° C Cold Trap



CentriVap -105° C Cold Trap

| Catalog Number | Temperature | Lid | Electrical Requirements | Receptacle & Plug Type | Overall Dimensions (w x d x h) | Shipping Weight |
|----------------|-------------------|-----------------|-------------------------|----------------------------|--------------------------------|------------------|
| 7811020 | -50° C (-58° F) | Acrylic | 115V, 60 Hz, 7.0A | North America, 115V, 60 Hz | 14.5" x 24.2" x 13.8" | 80 lbs. (36 kg) |
| 7811021 | -50° C (-58° F) | Stainless Steel | 115V, 60 Hz, 7.0A | North America, 115V, 60 Hz | 14.5" x 24.2" x 13.8" | 80 lbs. (36 kg) |
| 7811040 | -50° C (-58° F) | Acrylic | 230V, 60 Hz, 3A | North America, 230V | 14.5" x 24.2" x 13.8" | 80 lbs. (36 kg) |
| 7811041 | -50° C (-58° F) | Stainless Steel | 230V, 60 Hz, 3A | North America, 230V | 14.5" x 24.2" x 13.8" | 80 lbs. (36 kg) |
| 7811030 | -50° C (-58° F) | Acrylic | 230V, 50 Hz, 3A | Schuko | 14.5" x 24.2" x 13.8" | 80 lbs. (36 kg) |
| 7811031 | -50° C (-58° F) | Stainless Steel | 230V, 50 Hz, 3A | Schuko | 14.5" x 24.2" x 13.8" | 80 lbs. (36 kg) |
| 7811035 | -50° C (-58° F) | Acrylic | 230V, 50 Hz, 3A | British (UK) | 14.5" x 24.2" x 13.8" | 80 lbs. (36 kg) |
| 7811036 | -50° C (-58° F) | Stainless Steel | 230V, 50 Hz, 3A | British (UK) | 14.5" x 24.2" x 13.8" | 80 lbs. (36 kg) |
| 7811037 | -50° C (-58° F) | Acrylic | 230V, 50 Hz, 3A | China/Australia | 14.5" x 24.2" x 13.8" | 80 lbs. (36 kg) |
| 7811038 | -50° C (-58° F) | Stainless Steel | 230V, 50 Hz, 3A | China/Australia | 14.5" x 24.2" x 13.8" | 80 lbs. (36 kg) |
| 7460020 | -84° C (-119° F) | Stainless Steel | 115V, 60 Hz, 12A | North America, 115V, 60 Hz | 14.5" x 22" x 20.9" | 142 lbs. (64 kg) |
| 7460040 | -84° C (-119° F) | Stainless Steel | 230V, 60 Hz, 6A | North America, 230V | 14.5" x 22" x 20.9" | 142 lbs. (64 kg) |
| 7460030 | -84° C (-119° F) | Stainless Steel | 230V, 50 Hz, 6A | Schuko | 14.5" x 22" x 20.9" | 142 lbs. (64 kg) |
| 7460035 | -84° C (-119° F) | Stainless Steel | 230V, 50 Hz, 6A | British (UK) | 14.5" x 22" x 20.9" | 142 lbs. (64 kg) |
| 7460037 | -84° C (-119° F) | Stainless Steel | 230V, 50 Hz, 6A | China/Australia | 14.5" x 22" x 20.9" | 142 lbs. (64 kg) |
| 7385020 | -105° C (-157° F) | Stainless Steel | 115V, 60 Hz, 13A | North America, 115V, 60 Hz | 24.1" x 23.9" x 17.6" | 170 lbs. (77 kg) |
| 7385040 | -105° C (-157° F) | Stainless Steel | 230V, 60 Hz, 7A | North America, 230V | 24.1" x 23.9" x 17.6" | 170 lbs. (77 kg) |
| 7385030 | -105° C (-157° F) | Stainless Steel | 230V, 50 Hz, 7A | Schuko | 24.1" x 23.9" x 17.6" | 170 lbs. (77 kg) |
| 7385035 | -105° C (-157° F) | Stainless Steel | 230V, 50 Hz, 7A | British (UK) | 24.1" x 23.9" x 17.6" | 170 lbs. (77 kg) |
| 7385037 | -105° C (-157° F) | Stainless Steel | 230V, 50 Hz, 7A | China/Australia | 24.1" x 23.9" x 17.6" | 170 lbs. (77 kg) |

⚠ WARNING: Cancer – P65Warnings.ca.gov (California only)

Accessories

RapidVap N₂ and N₂/48 Evaporators



PTFE-Coated Aluminum Blocks. All RapidVap N₂ Evaporators include an 8-place PTFE-Coated Aluminum Block, 7494500. Additional blocks may be purchased for standby use. **All RapidVap N₂/48 Evaporators require a block (not included).** Custom blocks to fit special glassware such as VOA vials are available by request. **Glassware is required (not included).**

| Catalog Number | Block Tube Capacity | Sample Tube Size | Sample Volume** | For Use With | Shipping Weight |
|----------------|---------------------|---|-----------------|-------------------------------------|-------------------|
| 7494500 | 8 | 600 ml borosilicate glass tubes, up to 600 ml | 450 ml | N ₂ , N ₂ /48 | 6.4 lbs. (2.9 kg) |
| 7486400 | 8 | 170 ml borosilicate glass tubes, up to 170 ml | 125 ml | N ₂ | 8.2 lbs. (3.7 kg) |
| 7482100 | 48 | 12 x 75 mm OD tubes, up to 6 ml | 4.5 ml | N ₂ /48 | 8.0 lbs. (3.6 kg) |
| 7482200 | 48 | 13 x 100 mm OD tubes, up to 10 ml | 7.5 ml | N ₂ /48 | 8.0 lbs. (3.6 kg) |
| 7482300 | 48 | 16 x 150 mm OD tubes, up to 23 ml | 17 ml | N ₂ /48 | 7.4 lbs. (3.4 kg) |
| 7482400 | 48 | 20 x 150 mm OD tubes, up to 35 ml | 26 ml | N ₂ /48 | 7.8 lbs. (3.5 kg) |

*Maximum tube height is 150 mm. ** Actual sample volumes depend on tube shape, height and vortex speed.

Borosilicate Glass Tubes. For use with RapidVap N₂ Evaporators only. The ground glass tubes offer better fit and heat transfer for faster evaporation rates. The stems are designed for use with Cool-Zone timed end point determinations. To minimize evaporation time, the tube with the correct end point stem should be used. For example, if an end point of 1.5 ml is desired, selecting Tube 7913500 with a maximum 3.0 ml end point volume would result in an unnecessarily long period required to evaporate the final 1.5 ml in the stem. Flat-bottom tubes are for use in applications when samples are taken to dryness. Use the chart below to select the correct tube for your sample volume size and desired end point volume.



| Sample Volume | Desired End Point Volume | Tube Recommendations |
|---------------|--------------------------|----------------------|
| up to 125 ml | Dryness | 7927000, 7927108 |
| up to 125 ml | ≤1.5 ml | 7926600, 7926908 |
| up to 450 ml | Dryness | 7909200, 7913408 |
| up to 450 ml | ≤1.5 ml | 7925900, 7926008 |
| up to 450 ml | 0.6-1.5 ml | 7913900, 7914000 |
| up to 450 ml | 1.6-2.0 ml | 7913700, 7913808 |
| up to 450 ml | 2.1-3.0 ml | 7913500, 7913608 |

600 ml Tubes with Stems. For Block 7494500. Each graduated 600 ml tube has a sample capacity of up to 450 ml when vortexing. **For use with RapidVap N₂ Evaporators only.** Shipping weight 1 lb. (0.4 kg) for quantity one; 4 lbs. (1.8 kg) for quantity eight.

| Catalog Number (Quantity One) | Catalog Number (Quantity Eight) | End Point Volume | Calibration Markings |
|-------------------------------|---------------------------------|------------------|----------------------|
| 7925900 | 7926008 | 0.5 ml | 0.5 ml |
| 7913900 | 7914008 | 1.5 ml | 1.5, 1.0 and 0.5 ml |
| 7913700 | 7913808 | 2.0 ml | 2.0 and 1.0 ml |
| 7913500 | 7913608 | 3.0 ml | 3.0, 2.0 and 1.0 ml |

Accessories

RapidVap N₂ and N₂/48 Evaporators



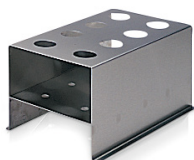
170 ml Tubes with Stems. For Block 7486400. Each graduated 170 ml tube has a sample capacity of up to 125 ml when vortexing. **For use with RapidVap N₂ Evaporators only.** Shipping weight 1 lb. (0.4 kg) for quantity one; 4 lbs. (1.8 kg) for quantity eight.

| Catalog Number | End Point Volume | Calibration Markings | Quantity Per Package |
|----------------|------------------|----------------------|----------------------|
| 7926600 | 0.5 ml | 1.5 ml | 1 |
| 7926908 | 0.5 ml | 1.5 ml | 8 |



Flat-Bottom Tubes. Borosilicate glass tubes offer better fit and heat transfer for faster evaporation rates. **170 ml Tubes for use with RapidVap Vacuum and N₂ Evaporators only.**

| Catalog Number | Sample Tube Size | Sample Volume | For Block | Quantity per Package | Shipping Weight |
|----------------|------------------|---------------|-----------|----------------------|-------------------|
| 7909200 | 600 ml | 450 ml | 7494500 | 1 | 1.0 lb. (0.4 kg) |
| 7913408 | 600 ml | 450 ml | 7494500 | 8 | 4.0 lbs. (1.8 kg) |
| 7927000 | 170 ml | 125 ml | 7486400 | 1 | 1.0 lb. (0.4 kg) |
| 7927108 | 170 ml | 125 ml | 7486400 | 8 | 4 lbs. (1.8 kg) |



Eight-Place Stainless Steel Racks. Hold tubes when loading and unloading RapidVap Evaporators. **Tubes are not included.** Shipping weight 2.0 lbs. (0.9 kg)

| Catalog Number | Sample Tube Size |
|----------------|------------------|
| 7487600 | 600 ml |
| 7486300 | 170 ml |



Glassware Caps. Caps fit over Tubes Borosilicate Glass Tubes. Placing Caps on Tubes helps prevent cross contamination and moisture from condensing when using low boiling point solvents. Eight Polyethylene Glassware Caps are included with each RapidVap N₂ Evaporator. **For use with RapidVap N₂ Evaporators only.** Shipping weight 0.5 lb. (0.2 kg)

| Catalog Number | Material | Description | Quantity per Package |
|----------------|--------------|------------------|----------------------|
| 7925500 | Polyethylene | Fits 600 ml Tube | 1 |
| 7925408 | PTFE | Fits 600 ml Tube | 8 |
| 7926808 | PTFE | Fits 170 ml Tube | 8 |



7302000—NitroVap 2LV Nitrogen Gas Generator. For NitroVap 2LV by Parker Hannifin produces up to 350 L/min of pure nitrogen at pressures up to 145 psi. With no electrical requirements, the NitroVap 2LV transforms standard compressed air into nitrogen and is ideal for use with RapidVap Evaporators. A supply of compressed air is required with a minimum flow rate of 335 L/min (11.8 scfm) at 50 psi and maximum flow rate of 660 L/min (23.3 scfm) at 150 psi. **For use with RapidVap N₂, N₂/48 and Vertex Evaporators only.**

RapidVap® Vertex™ Evaporators

Specifications

All models feature:

- Powder-coated steel exterior
- Glass lid
- * 900-watt dry block heating system
- 50 nitrogen-dispensing nozzles in five horizontal rows of 10
- 5 nitrogen control valves with on/off switches
- Front-mounted pressure regulator with analog display of pressure from 0 to 45 psi in 2 psi increments
- LCD with touchscreen programming and display of program number; set point temperature and actual system and sample/block temperatures in ° C or ° F; set point time and time remaining
- Microprocessor-controlled programming includes program number from 1 to 10, temperature of the system from 30° to 100° C (86° to 212° F), and time from 1 to 999 minutes or "ON." Memory stores 1 to 10 programs
- Temperature sensor probe for monitoring of block or sample temperature
- Built-in exhaust fan with blower
- On/off switch
- 6' (183 cm) of 2" (5 cm) ID polyethylene exhaust hose, with clamp
- 6' (183 cm) of flexible polyethylene tubing for nitrogen supply, with push-to-connect fitting
- One year warranty on materials and workmanship
- Overall dimensions with closed lid: 20.4" w x 13.0" d x 12.5" h (51.8 x 33.1 x 31.6 cm)
- Overall dimensions with open lid: 20.4" w x 13.0" d x 22.7" h (51.8 x 33.1 x 57.7 cm)
- Actual weight 35 lbs. (16 kg). Shipping weight 45 lbs. (20 kg)

Standards conformance & regulations:

- UL Standard 61010-1 (115V, 60 Hz and 230V, 50/60 Hz for North America models)
 - CAN/CSA C22.2 No. 61010-1 (115V, 60 Hz and 230V, 50/60 Hz for North America models)
 - CE Conformity marking (230V, 50/60 Hz for international models)
- ⚠ **WARNING:** Cancer—P65Warnings.ca.gov (California only)

Options include:

- Region-specific electrical plug configurations

All models require (not included):

- Aluminum Block. See page 9
- Sample tubes. Contact your laboratory supply dealer
- Nitrogen source with flow rate of 6.5 CFM/185 LPM minimum. Nitrogen pressure not to exceed 50 psi. Gas flow with 10 active nozzles is approximately 0.74 scfm @ 15 psi and 1.0 scfm @ 24 psi. Gas flow with 50 active nozzles is approximately 4.5 scfm @ 20 psi and 5.0 scfm @ 24 psi. A nitrogen generator is recommended. See page 22 for ordering information on the Nitro 2LV Nitrogen Generator or contact your nitrogen gas supplier

* Labconco exclusive feature



RapidVap® Vacuum Evaporators

Specifications

All models feature:

- Powder-coated aluminum base with acrylic/PVC thermoplastic upper housing
- Glass lid with polycarbonate shield
- Dual lid clamps
- Phenol-free gasket
- PTFE-coated aluminum chamber
- Rear-mounted 1/2" OD vacuum port, 30" of 1/2" ID vacuum tubing, two tubing clamps and lid heater receptacle
- 1000-watt dry block heating system
- * Microprocessor-controlled programming for vortex speed from 0 to 100%; heat from OFF to 100° C; time from 1 to 999 minutes; vacuum level from 0 to 999 mBar. Memory stores 1 to 9 programs
- LCD for display of program number and actual and set point vortex speeds, temperatures, time remaining, and point vacuum level
- Control panel with RUN/STOP button, PREHEAT/END ALARM button and indicator light, VACUUM RELEASE button and indicator light, set point selection buttons, and increase/decrease programming buttons
- Belt-driven, non-sparking, brushless DC motor with smooth variable-speed power to drive the vortex motion up to 1000 rpm
- Audible alarm for timed end point
- * Audible/visual alarm for end point detected by temperature sensors at heater and block
- Automatic vacuum release in the event of power failure
- All mechanical components isolated from chemical fumes and vapors
- 115V models include 6.5', three-wire electrical cord with 20A plug. A 20A minimum circuit breaker is required
- 230V models include 6.5', three-wire electrical cord with 15A plug. A 10A minimum circuit breaker is required
- Overall dimensions with closed lid: 20.7" w x 18.4" d x 13.5" h (52.6 x 46.7 x 34.3 cm)
- Overall dimensions with open lid: 20.7" w x 21.3" d x 24.9" h (52.6 x 54.1 x 63.2 cm)
- Actual weight 92 lbs. (42 kg). Shipping weight 100 lbs. (45 kg)

Standards conformance & regulations:

- UL Standard 61010-1 (115V, 60 Hz models)
 - CAN/CSA C22.2 No. 61010-1 (115V, 60 Hz models)
 - CE Conformity marking (230V, 50/60 Hz models)
- ⚠ **WARNING:** Cancer—P65Warnings.ca.gov (California only)

Options include:

- Glass lid with 40-watt heater
- RS-232 Link. RS-232 port, located on the rear of the unit, for two-way communication at 4800 baud, no parity, 8 bit word, 1 stop bit and 3-wire interface

All models require (not included):

- Vacuum Pump. See page 19
- Sample Block. See pages 18
- Glassware. See page 18 or contact your laboratory supply dealer

RapidVap Vacuum Evaporators should be located within a fume hood if hazardous or flammable solvents are used. In all cases, regardless of the solvent used, it is recommended that the vacuum pump be vented in a fume hood.

* Labconco exclusive feature



RapidVap® N₂ Evaporators

Specifications

All models feature:

- Powder-coated aluminum base with acrylic/PVC thermoplastic upper housing
- Glass lid
- Dual lid clamps
- Phenol-free gasket
- PTFE-coated aluminum chamber
- PTFE-coated aluminum sample block capable of holding 8 each 600 ml tubes. Glassware sold separately
- 1000-watt dry block heating system
- * Microprocessor-controlled programming for vortex speed from 0 to 100%; heat from OFF to 100° C; time from 1 to 999 minutes; and number of active nitrogen positions, 2, 4, 6 or 8. Memory stores 1 to 9 programs
- LCD for display of program number, actual and set point vortex speed, actual and set point temperature, time remaining, and number of active nitrogen positions. Memory stores 1 to 9 programs
- Control panel with RUN/STOP button, PREHEAT/END ALARM button and indicator light, set point selection buttons, and increase/decrease programming buttons
- Belt-driven, non-sparking, brushless DC motor with smooth variable-speed power to drive the vortex motion up to 500 rpm
- Audible alarm with automatic shut down for timed end point
- * Audible/visual alarm for end point detected by temperature sensors at heater and block
- Nitrogen inlet port supplied with a 1/4" male NPT thread
- All mechanical components isolated from chemical fumes and vapors
- Includes 8 polyethylene glassware caps, 6' of 2" dia. exhaust tubing, 78" of tubing for nitrogen supply and one tubing clamp
- 115V models include 6.5', three-wire electrical cord with 20A plug. A 15A minimum circuit breaker is required
- 230V models include 6.5', three-wire electrical cord with 15A plug. An 8A minimum circuit breaker is required
- Overall dimensions with closed lid: 21.7" w x 19.0" d x 13.5" h (55.1 x 48.3 x 34.3 cm)
- Overall dimensions with open lid: 21.7" w x 21.3" d x 24.9" h (55.1 x 54.1 x 63.2 cm)
- Actual weight 99 lbs. (45 kg). Shipping weight 107 lbs. (49 kg)

Standards conformance & regulations:

- UL Standard 61010-1 (115V, 60 Hz models)
 - CAN/CSA C22.2 No. 61010-1 (115V, 60 Hz models)
 - CE Conformity marking (230V, 50/60 Hz models)
- ⚠ **WARNING:** Cancer—P65Warnings.ca.gov (California only)

Options include:

- RS-232 Link. RS-232 port, located on the rear of the unit, for two-way communication at 4800 baud, no parity, 8 bit word, 1 stop bit and 3-wire interface

All models require (not included):

- Glassware. See pages 21-22
- Nitrogen source with a flow rate of 0.6 CFM/17 LPM minimum. See page 22 for ordering information on the Nitro 2LV Nitrogen Generator or contact your nitrogen gas supplier
- Gas pressure regulator. Pressure of 5-10 psi is typical. Pressure must not exceed 20 psi. Contact a local supplier

RapidVap N₂ Evaporators should be located within a fume hood if hazardous or flammable solvents are used. In all cases, regardless of the solvent used, it is recommended that the exhaust hose be vented into a fume hood or other laboratory ventilation device.

* Labconco exclusive feature



RapidVap® N₂/48 Evaporators

Specifications

All models feature:

- Powder-coated aluminum base with acrylic/PVC thermoplastic upper housing
- Glass lid
- Dual lid clamps
- Phenol-free gasket
- PTFE-coated aluminum chamber
- 1000-watt dry block heating system
- * Microprocessor-controlled programming for vortex speed from 0 to 100%; heat from OFF to 100° C; time from 1 to 999 minutes; and number of active nitrogen clusters, 2, 4, 6 or 8. Memory stores 1 to 9 programs
- LCD for display of program number, actual and set point vortex speed, actual and set point temperature, time remaining, and number of active nitrogen clusters
- Control panel with RUN/STOP button, PREHEAT/END ALARM button and indicator light, set point selection buttons, and increase/decrease programming buttons
- Belt-driven, non-sparking, brushless DC motor with smooth variable-speed power to drive the vortex motion up to 500 rpm
- Audible alarm with automatic shut down for timed end point
- * Audible/visual alarm for end point detected by temperature sensors at heater and block
- Nitrogen inlet hose, 1/4" ID
- All mechanical components isolated from chemical fumes and vapors
- Includes 6' of 2" dia. exhaust tubing, 78" of tubing for nitrogen supply and one tubing clamp
- 115V models include 6.5', three-wire electrical cord with 20A plug. A 15A minimum circuit breaker is required
- 230V models include 6.5', three-wire electrical cord with 15A plug. An 8A minimum circuit breaker is required
- Overall dimensions with closed lid: 21.7" w x 19.0" d x 13.5" h (55.1 x 48.3 x 34.3 cm)
- Overall dimensions with open lid: 21.7" w x 21.3" d x 24.9" h (55.1 x 54.1 x 63.2 cm)
- Actual weight 92 lbs. (42 kg). Shipping weight 100 lbs. (45 kg)

Standards conformance & regulations:

- UL Standard 61010-1 (115V, 60 Hz models)
 - CAN/CSA C22.2 No. 61010-1 (115V, 60 Hz models)
 - CE Conformity marking (230V, 50/60 Hz models)
- ⚠ **WARNING:** Cancer — P65Warnings.ca.gov (California only)

Options include:

- RS-232 Link. RS-232 port, located on the rear of the unit, for two-way communication at 4800 baud, no parity, 8 bit word, 1 stop bit and 3-wire interface

All models require (not included):

- Sample Block. See page 21
- Glassware. Contact your laboratory supply dealer
- Nitrogen with a flow rate of 3.5 CFM/100 LPM minimum. See page 22 for ordering information on the Nitro 2LV Nitrogen Generator or contact your nitrogen gas supplier
- Gas pressure regulator. Pressure of 5-10 psi is typical. Pressure must not exceed 20 psi. Contact a local supplier

RapidVap N₂/48 Evaporators should be located within a fume hood if hazardous or flammable solvents are used. In all cases, regardless of the solvent used, it is recommended that the exhaust hose be vented into a fume hood or other laboratory ventilation device.

* Labconco exclusive feature



RapidVap® Vertex™ Evaporators

Recovery Data

Test results show that the RapidVap Vertex Evaporator produces excellent recoveries of a wide range of compounds.

Procedure: A 15 ml sample consisting of a combination of several of the compounds listed below was prepared in duplicate along with a method blank of pure solvent and each sample or blank was added to a 20 x 150 mm tube and placed in Block 7322000. BNA mixtures were added to Methylene Chloride and run at 40° C and 12 psi nitrogen for approximately 30 minutes. A second set of samples was run at 40° C and 24 psi nitrogen for approximately 22 minutes. All other compound mixtures were added to Hexane and run at 70° C and 12 psi nitrogen for approximately 15 minutes. A second set of samples was run at 24 psi nitrogen for approximately 12 minutes. Ending volumes for all samples were approximately 1 ml. Recovery rates for the two samples were averaged and are shown below.

| | % Recovery | | | % Recovery | | | % Recovery | |
|-------------------------------|------------|----------|--|------------|----------|---|------------|----------|
| | @ 12 psi | @ 24 psi | | @ 12 psi | @ 24 psi | | @ 12 psi | @ 24 psi |
| BNAs (EPA 8270 method) | | | | | | | | |
| N-Nitrosodimethylamine | 111 | 107 | Phenanthrene | 100 | 105 | Dimethoate | 99 | 99 |
| Phenol | 94 | 96 | Anthracene | 92 | 100 | Ronnel | 105 | 106 |
| Aniline | 116 | 118 | Di-n-butyl Phthalate | 88 | 103 | Chlorpyrifos | 107 | 108 |
| Bis(2-Chloroethyl) Ether | 97 | 97 | Fluoranthene | 90 | 99 | Methyl Parathion | 110 | 110 |
| 2-Chlorophenol | 92 | 93 | Pyrene | 103 | 103 | Fenthion | 106 | 106 |
| 1,3-Dichlorobenzene | 85 | 89 | Butyl Benzyl Phthalate | 102 | 97 | Malathion | 108 | 108 |
| 1,4-Dichlorobenzene | 85 | 88 | Benzo[a]anthracene | 104 | 100 | Merphos | 100 | 98 |
| Benzyl Alcohol | 90 | 100 | Chrysene | 104 | 102 | Tokuthion (Prothiofos) | 110 | 110 |
| 1,2-Dichlorobenzene | 83 | 87 | Bis[2-Ethylhexyl] Phthalate | 101 | 100 | Bolstar | 107 | 106 |
| 2-Methylphenol | 93 | 99 | Di-n-octyl Phthalate | 96 | 102 | Fensulfothion | 110 | 107 |
| Bis(2-Chloroisopropyl) Ether | 94 | 99 | Indeno[1,2,3-cd]Pyrene | 95 | 99 | Methyl Azinphos | 108 | 108 |
| n-Nitroso-di-n-propylamine | 90 | 103 | Benzo[b]Fluoranthene | 94 | 100 | Coumaphos | 97 | 99 |
| (3 & 4)-Methylphenol | 92 | 94 | Benzo[k]Fluoranthene | 97 | 100 | EPN | 102 | 99 |
| Hexachloroethane | 92 | 96 | Benzo[a]Pyrene | 96 | 99 | Ethyl parathion | 104 | 104 |
| Nitrobenzene | 96 | 100 | Dibenz[a,h]anthracene | 92 | 93 | Sulfotepp | 103 | 108 |
| Isophorone | 98 | 100 | Benzo[ghi]perylene | 90 | 93 | Tetrachlorvinphos | 109 | 110 |
| 2-Nitrophenol | 90 | 96 | Organochlorine Insecticides & Metabolites (EPA 8081 method) | | | Nitrogen/Phosphorous Herbicides & Insecticides (EPA 8141 method) | | |
| 2,4-Dimethylphenol | 95 | 94 | alpha-Chlordane | 104 | 105 | EPTC | 103 | 101 |
| Bis(2-Chloroethoxy)Methane | 85 | 102 | gamma-Chlordane | 103 | 102 | Butylate | 104 | 104 |
| 2,4-Dichlorophenol | 94 | 102 | alpha-BHC | 103 | 106 | Propachlor | 105 | 104 |
| 1,2,4-Trichlorobenzene | 90 | 92 | gamma-BHC (Lindane) | 103 | 106 | Trifluralin | 98 | 93 |
| Naphthalene | 90 | 99 | beta-BHC | 105 | 107 | Terbufos | 97 | 97 |
| 4-Chloroaniline | 109 | 111 | Heptachlor | 108 | 109 | Atrazine | 103 | 100 |
| Hexachlorobutadiene | 83 | 90 | delta-BHC | 107 | 110 | Simazine | 106 | 101 |
| 4-Chloro-3-methylphenol | 89 | 90 | Aldrin | 102 | 103 | Alachlor | 105 | 102 |
| 2-Methylnaphthalene | 96 | 107 | Heptachlor Epoxide | 105 | 107 | Metribuzin | 101 | 100 |
| Hexachlorocyclopentadiene | 65 | 76 | Endosulfan I | 107 | 108 | Metolachlor | 101 | 104 |
| 2,4,6-Trichlorophenol | 85 | 92 | 4,4'-DDE | 104 | 104 | Pendimethalin | 103 | 100 |
| 2,4,5-Trichlorophenol | 74 | 79 | Dieldrin | 107 | 109 | Butachlor | 105 | 100 |
| 2-Chloronaphthalene | 92 | 96 | Endrin | 104 | 106 | Cyanazine | 92 | 90 |
| 2-Nitroaniline | 92 | 91 | 4,4'-DDD | 112 | 115 | Acetochlor | 96 | 100 |
| Dimethylphthalate | 92 | 103 | Endosulfan II | 106 | 106 | Chlorinated Phenoxy Herbicides (EPA 8151 method) | | |
| Acenaphthylene | 92 | 98 | 4,4'-DDT | 112 | 112 | Dalapon | 69 | 70 |
| 2,6-Dinitrotoluene | 99 | 106 | Endrin Aldehyde | 106 | 108 | 3,5-Dichlorobenzoic acid | 102 | 103 |
| 3-Nitroaniline | 96 | 108 | Endosulfan Sulfate | 116 | 114 | Dicamba | 98 | 101 |
| Acenaphthene | 87 | 89 | Methoxychlor | 106 | 106 | Dichlorprop | 104 | 104 |
| 2,4-Dinitrophenol | 89 | 89 | Endrin ketone | 114 | 127 | 2,4-D | 104 | 104 |
| Dibenzofuran | 88 | 91 | Hexachlorobenzene | 103 | 104 | Pentachlorophenol | 100 | 101 |
| 2,4-Dinitrotoluene | 93 | 90 | Organophosphorus Insecticides (EPA 8141 method) | | | 2,4,5-TP (Silvex) | 102 | 103 |
| 4-Nitrophenol | 90 | 89 | Naled | 93 | 105 | Chloramben | 106 | 109 |
| Diethyl Phthalate | 95 | 93 | Dichlorvos | 105 | 100 | 2,4,5-T | 104 | 104 |
| Fluorene | 90 | 100 | Mevinphos | 107 | 107 | 2,4-DB | 105 | 105 |
| 4-Chlorophenyl Phenyl Ether | 78 | 85 | Ethoprop | 92 | 104 | Bentazon | 105 | 106 |
| 4-Nitroaniline | 103 | 110 | Phorate | 98 | 104 | Picloram | 113 | 114 |
| 4,6-Dinitro-2-methylphenol | 90 | 103 | Demeton, O & S | 96 | 102 | Dinoseb | 104 | 104 |
| N-Nitrosodiphenylamine | 92 | 100 | Diazinon | 99 | 103 | DCPA | 104 | 104 |
| Azobenzene | 89 | 102 | Disulfoton | 93 | 101 | Acifluorfen | 112 | 114 |
| 4-Bromophenyl Phenyl Ether | 97 | 102 | | | | | | |
| Hexachlorobenzene | 89 | 94 | | | | | | |
| Pentachlorophenol | 77 | 89 | | | | | | |

RapidVap® Vacuum Evaporators

Recovery Data

Test results show that the RapidVap Vacuum Evaporator produces excellent recoveries of a wide range of compounds.

Procedure: Samples consisting of a combination of several of the compounds listed below were prepared and each of the resulting compound mixtures was added to a separate 600 ml flat-bottom sample tube containing 300 mL methylene chloride and placed in Block 7494500 in the RapidVap Evaporator 7900000. The following parameters were set: heat at 50° C, vortex speed at 28% of maximum, and vacuum of 250 mBar. The RapidVap was allowed to run continuously until the sample volume was reduced to 1 ml. A mass spectrometer was used to compare original compound amounts to the amounts detected in the reduced sample. Duplicates of the compound mixtures were tested and the percentages averaged.

| % Recovery | | % Recovery | | % Recovery | |
|------------------------------|----|--|-----|--|-----|
| BNAs | | Isophorone | 76 | Dimethoate | 123 |
| Compound | | (3 & 4)-Methylphenol | 73 | Disulfoton | 71 |
| Acenaphthene | 79 | 2-Methylnaphthalene | 78 | EPN | 87 |
| Acenaphthylene | 80 | 2-Methylphenol | 69 | Ethoprosfos | 89 |
| Aniline | 64 | n-Nitroso-di-n-propylamine | 90 | Ethoprop | 81 |
| Anthracene | 86 | N-Nitrosodimethylamine | 63 | Ethyl Parathion | 91 |
| Azobenzene | 84 | N-Nitrosodiphenylamine | 82 | Fensulfothion | 94 |
| Benzo(a)anthracene | 82 | Naphthalene | 71 | Fenthion | 77 |
| Benzo(a)Pyrene | 85 | 2-Nitroaniline | 79 | Malathion | 87 |
| Benzo(b)Fluoranthene | 84 | 3-Nitroaniline | 86 | Merphos | 84 |
| Benzo(g,h,i)perylene | 86 | 4-Nitroaniline | 82 | Methyl Azinphos | 92 |
| Benzo(k)Fluoranthene | 87 | Nitrobenzene | 67 | Methyl Parathion | 85 |
| Benzoic Acid | 70 | Nitrobenzene-d5 (SURR) | 62 | Mevinphos | 110 |
| Benzyl Alcohol | 73 | 2-Nitrophenol | 69 | Monocrotophos | 99 |
| Bis(2-Chloroethoxy) Methane | 75 | 4-Nitrophenol | 87 | Naled | 78 |
| Bis(2-Chloroethyl) Ether | 67 | p-Terphenyl-d14 (SURR) | 84 | Phorate | 75 |
| Bis(2-Chloroisopropyl) Ether | 67 | Pentachlorophenol | 71 | Ronnel | 79 |
| Bis(2-ethylhexyl)Phthalate | 88 | Phenanthrene | 86 | Sulfotepp | 82 |
| 4-Bromophenyl Phenyl Ether | 76 | Phenol | 69 | TEPP | 95 |
| Butyl Benzyl Phthalate | 85 | Phenol-d6 (SURR) | 64 | Tokuthion* | 79 |
| 4-Chloro-3-methylphenol | 78 | Pyrene | 81 | Trichloronate | 80 |
| 4-Chloroaniline | 90 | Pyridine | 59 | | |
| 2-Chloronaphthalene | 75 | 1,2,4-Trichlorobenzene | 69 | Semivolatile Organic Pesticides | |
| 2-Chlorophenol | 64 | 2,4,5-Trichlorophenol | 75 | Analyte | |
| 4-Chlorophenyl Phenyl Ether | 80 | 2,4,6-Tribromophenol (SURR) | 74 | Aldrin | 83 |
| Chrysene | 86 | 2,4,6-Trichlorophenol | 76 | alpha-BHC | 88 |
| Dalapon | 58 | | | beta-BHC | 100 |
| Di-n-butyl Phthalate | 86 | Chlorinated Herbicides (Phenoxy)s | | 4,4'-DDD | 87 |
| Di-n-octyl Phthalate | 89 | Analyte | | 4,4'-DDE | 83 |
| Dibenzo(a,h)anthracene | 84 | Bentazon | 95 | 4,4'-DDT | 93 |
| Dibenzofuran | 82 | Chloramben | 116 | delta-BHC | 96 |
| 1,2-Dichlorobenzene | 63 | 2,4-D | 94 | Dieldrin | 83 |
| 1,3-Dichlorobenzene | 62 | 2,4-DB | 99 | Endosulfan I | 75 |
| 1,4-Dichlorobenzene | 62 | Dicamba | 100 | Endosulfan II | 84 |
| 3,3'-Dichlorobenzidine | 86 | 3,5-Dichlorobenzoic Acid | 91 | Endosulfan sulfate | 93 |
| 2,4-Dichlorophenol | 72 | Dichlorprop | 89 | Endrin | 90 |
| Diethyl Phthalate | 82 | MCPA | 80 | Endrin Ketone | 96 |
| 2,4-Dimethylphenol | 68 | MCPP | 86 | gamma-BHC (Lindane) | 100 |
| Dimethylphthalate | 79 | Pentachlorophenol | 68 | Heptachlor | 83 |
| 4,6-Dinitro-2-methylphenol | 81 | Picloram | 106 | Heptachlor epoxide | 79 |
| 2,4-Dinitrophenol | 70 | 2,4,5-T | 118 | Methoxychlor | 97 |
| 2,4-Dinitrotoluene | 80 | 2,4,5-TP (Silvex) | 92 | | |
| 2,6-Dinitrotoluene | 83 | Tetrachloroterephthalic Acid | 90 | | |
| Fluoranthene | 85 | | | | |
| Fluorene | 83 | Organophosphorous Pesticides | | | |
| 2-Fluorobiphenyl (SURR) | 75 | Analyte | | | |
| 2-Fluorophenol (SURR) | 46 | Bolstar | 85 | | |
| Hexachlorobenzene | 84 | Chlorpyrifos | 83 | | |
| Hexachlorobutadiene | 67 | Coumaphos | 90 | | |
| Hexachlorocyclopentadiene | 58 | Demeton, O & S | 107 | Testing conducted by | |
| Hexachloroethane | 62 | Diazinon | 86 | Keystone Laboratories, Inc. | |
| Indeno(1,2,3-cd)Pyrene | 84 | Dichlorvos | 86 | Newton, Iowa | |

RapidVap® N₂ Evaporators

Recovery Data

Test results show that the RapidVap N₂ Evaporator produces excellent recoveries of a wide range of compounds.

Procedure: Samples consisting of a combination of several of the compounds listed below were prepared and each of the resulting compound mixtures was added to a separate 600 ml sample tube with 1.5 ml stems containing 300 ml methylene chloride and placed in the RapidVap N₂ Evaporator 7910000. Sample tubes were not capped. The following parameters were set: heat at 40° C, vortex speed at 60% of maximum, and nitrogen pressure of 10 psi. The RapidVap was allowed to run continuously until the sample volumes were reduced to 1 ml. A mass spectrometer was used to compare original compound amounts to the amounts detected in the reduced samples. Duplicates of the compound mixtures were tested and the percentages averaged.

| % Recovery | | % Recovery | | % Recovery | |
|------------------------------|-----|--|-----|--|-----|
| BNAs | | 2-Methylnaphthalene | 83 | Ethoprop | 88 |
| Analyte | | (3 & 4)-Methylphenol | 100 | Ethyl Parathion | 86 |
| Acenaphthene | 97 | 2-Methylphenol | 100 | Fensulfothion | 100 |
| Acenaphthylene | 92 | n-Nitroso-di-n-propylamine | 73 | Fenthion | 89 |
| Aniline | 87 | N-Nitrosodimethylamine | 83 | Malathion | 92 |
| Anthracene | 91 | N-Nitrosodiphenylamine | 85 | Merphos | 93 |
| Azobenzene | 83 | Naphthalene | 94 | Methyl Azinphos | 99 |
| Benzo(a)anthracene | 97 | 2-Nitroaniline | 85 | Methyl Parathion | 84 |
| Benzo(a)Pyrene | 91 | 3-Nitroaniline | 92 | Mevinphos | 88 |
| Benzo(b)Fluoranthene | 96 | 4-Nitroaniline | 95 | Monocrotophos | 82 |
| Benzo(g,h,i)perylene | 82 | Nitrobenzene | 77 | Naled | 83 |
| Benzo(k)Fluoranthene | 100 | Nitrobenzene-d5 (SURR) | 77 | Phorate | 79 |
| Benzoic Acid | 100 | 2-Nitrophenol | 98 | Ronnel | 85 |
| Benzyl Alcohol | 80 | 4-Nitrophenol | 100 | TEPP | 59 |
| Bis(2-Chloroethoxy) Methane | 81 | p-Terphenyl-d14 (SURR) | 87 | Tokuthion | 88 |
| Bis(2-Chloroethyl) Ether | 76 | Pentachlorophenol | 100 | Trichloronate | 85 |
| Bis(2-Chloroisopropyl) Ether | 67 | Phenanthrene | 91 | | |
| Bis(2-ethylhexyl)Phthalate | 93 | Phenol | 95 | Semivolatile Organic Pesticides | |
| 4-Bromophenyl Phenyl Ether | 86 | Phenol-d6 (SURR) | 76 | Analyte | |
| Butyl Benzyl Phthalate | 94 | Pyrene | 96 | Aldrin | 84 |
| 4-Chloro-3-methylphenol | 91 | Pyridine | 6 | alpha-BHC | 88 |
| 4-Chloroaniline | 99 | 2,4,6-Tribromophenol (SURR) | 79 | beta-BHC | 86 |
| 2-Chloronaphthalene | 76 | 2,4,5-Trichlorophenol | 94 | 4,4'-DDD | 90 |
| 2-Chlorophenol | 95 | 2,4,6-Trichlorophenol | 96 | 4,4'-DDE | 86 |
| 4-Chlorophenyl Phenyl Ether | 82 | | | 4,4'-DDT | 96 |
| Chrysene | 96 | Chlorinated Herbicides (Phenoxy)s | | delta-BHC | 92 |
| Di-n-butyl Phthalate | 87 | Analyte | | Dieldrin | 87 |
| Di-n-octyl Phthalate | 90 | Acifluorfen | 100 | Endosulfan I | 92 |
| Dibenzo(a,h)anthracene | 92 | Bentazon | 93 | Endosulfan II | 93 |
| Dibenzofuran | 78 | Chloramben | 46 | Endosulfan sulfate | 87 |
| 1,2-Dichlorobenzene | 78 | 2,4-D | 100 | Endrin | 92 |
| 1,3-Dichlorobenzene | 75 | 2,4-DB | 93 | gamma-BHC (Lindane) | 84 |
| 1,4-Dichlorobenzene | 75 | Dicamba | 87 | Heptachlor | 84 |
| 3,3'-Dichlorobenzidine | 97 | 3,5-Dichlorobenzoic Acid | 83 | Heptachlor epoxide | 92 |
| 2,4-Dichlorophenol | 97 | Dichlorprop | 82 | Methoxychlor | 96 |
| Diethyl Phthalate | 85 | 4-Nitrophenol | 100 | | |
| 2,4-Dimethylphenol | 100 | MCPA | 80 | | |
| Dimethylphthalate | 80 | MCPP | 78 | | |
| 4,6-Dinitro-2-methylphenol | 100 | Pentachlorophenol | 82 | | |
| 2,4-Dinitrophenol | 100 | 2,4,5-T | 78 | | |
| 2,4-Dinitrotoluene | 82 | 2,4,5-TP (Silvex) | 85 | | |
| 2,6-Dinitrotoluene | 83 | | | | |
| Fluoranthene | 100 | Organophosphorous Pesticides | | | |
| Fluorene | 97 | Analyte | | | |
| 2-Fluorobiphenyl (SURR) | 79 | Bolstar | 89 | | |
| 2-Fluorophenol (SURR) | 77 | Chlorpyrifos | 86 | | |
| Hexachlorobenzene | 84 | Coumaphos | 98 | | |
| Hexachlorobutadiene | 78 | Demeton, O & S | 82 | | |
| Hexachlorocyclopentadiene | 73 | Diazinon | 89 | | |
| Hexachloroethane | 71 | Dichlorvos | 83 | | |
| Indeno(1,2,3-cd)Pyrene | 86 | Disulfoton | 72 | | |
| Isophorone | 77 | EPN | 88 | | |
| | | | | Testing conducted by | |
| | | | | Keystone Laboratories, Inc. | |
| | | | | Newton, Iowa | |

RapidVap® N₂/48 Evaporators

Recovery Data

Test results show that the RapidVap N₂/48 Evaporator produces excellent recoveries of a wide range of analytes. Carryover from one tube to another was not detectable.

Procedure: Samples consisting of a combination of several of the analytes listed below were prepared and each of the resulting analyte mixtures was added to a separate 20 mm sample tube containing 10 ml methylene chloride and placed in the RapidVap N₂/48 Evaporator 7910012. The following parameters were set: heat at 40° C, vortex speed at 100% of maximum, and nitrogen pressure of 15 psi. The RapidVap was allowed to run continuously until the sample volumes were reduced to 1 ml. A mass spectrometer was used to compare original compound amounts to the amounts detected in the reduced samples. Duplicates of the analyte mixtures were tested and the percentages averaged.

| % Recovery | | % Recovery | | % Recovery | |
|------------------------------|-------|---|-------|--|-------|
| BNAs | | Dibenzo(a,h) Anthracene | 88.2 | Demeton | 90.7 |
| Analyte | | Dibenzofuran | 95.0 | Diazinon | 97.4 |
| 1,2,4-Trichlorobenzene | 86.3 | Diethyl Phthalate | 96.7 | Dichlorvos | 94.2 |
| 1,2-Dichlorobenzene | 78.7 | Dimethyl Phthalate | 96.5 | Disulfoton | 99.9 |
| 1,3-Dichlorobenzene | 78.2 | Di-n-butyl Phthalate | 98.4 | EPN | 94.8 |
| 1,4-Dichlorobenzene | 78.6 | Di-n-octyl Phthalate | 95.9 | Ethoprop | 98.8 |
| 2,4,5-Trichlorophenol | 95.5 | Fluoranthene | 98.1 | Fensulfothion | 75.9 |
| 2,4,6-Tribromophenol (SURRE) | 92.6 | Fluorene | 96.7 | Fenthion | 97.8 |
| 2,4,6-Trichlorophenol | 92.5 | Hexachlorobenzene | 95.9 | Malathion | 89.2 |
| 2,4-Dichlorophenol | 89.1 | Hexachlorobutadiene | 84.0 | Merphos | 95.5 |
| 2,4-Dimethylphenol | 89.6 | Hexachlorocyclopentadiene | 90.3 | Methyl Parathion | 100.0 |
| 2,4-Dinitrophenol | 89.3 | Hexachloroethane | 80.2 | Mevinphos | 94.8 |
| 2,4-Dinitrotoluene | 96.7 | Indeno(1,2,3-cd) Pyrene | 87.9 | Monocrotophos | 87.9 |
| 2,6-Dinitrotoluene | 96.9 | Isophorone | 94.7 | Naled | 99.9 |
| 2-Chloronaphthalene | 94.1 | Naphthalene | 88.7 | Phorate | 98.4 |
| 2-Chlorophenol | 82.2 | Nitrobenzene | 87.9 | Ronnel | 98.0 |
| 2-Fluorobiphenyl (SURRE) | 93.5 | Nitrobenzene-d5 (SURRE) | 87.8 | TEPP | 63.4 |
| 2-Fluorophenol (SURRE) | 78.1 | N-Nitrosodimethylamine | 75.9 | Tokuthion | 100.0 |
| 2-Methylnaphthalene | 92.6 | N-Nitroso-Di-n-propylamine | 91.7 | Trichloronate | 98.1 |
| 2-Methylphenol | 88.9 | N-Nitrosodiphenylamine | 100.0 | | |
| 2-Nitroaniline | 95.5 | Pentachlorophenol | 93.7 | Semivolatile Organic Pesticides | |
| 2-Nitrophenol | 87.9 | Phenanthrene | 96.9 | Analyte | |
| 3 & 4-Methylphenol | 88.5 | Phenol | 84.5 | 4,4-DDD | 95.7 |
| 3,3-Dichlorobenzidine | 100.0 | Phenol-d6 (SURRE) | 87.3 | 4,4-DDE | 97.3 |
| 3-Nitroaniline | 100.0 | p-Terphenyl-d14 (SURRE) | 98.1 | 4,4-DDT | 99.7 |
| 4,6-Dinitro-2-Methylphenol | 94.4 | Pyrene | 96.9 | Aldrin | 97.9 |
| 4-Bromophenyl Phenyl Ether | 96.4 | Pyridine | 74.5 | alpha-BHC | 97.4 |
| 4-Chloro-3-Methylphenol | 95.5 | | | beta-BHC | 98.1 |
| 4-Chloroaniline | 98.7 | Chlorinated Herbicides (Phenoxy) | | delta-BHC | 96.8 |
| 4-Chlorophenyl-Phenyl Ether | 96.3 | Analyte | | Dieldrin | 96.3 |
| 4-Nitroaniline | 100.0 | 2,4,5-T | 100 | Endosulfan I | 97.0 |
| 4-Nitrophenol | 95.5 | 2,4-D | 100 | Endosulfan II | 98.7 |
| Acenaphthene | 95.6 | 2,4-DB | 53 | Endosulfan Sulfate | 99.6 |
| Acenaphthylene | 96.8 | 3,5-Dichlorobenzoic Acid | 100 | Endrin | 99.0 |
| Aniline | 88.8 | 4-Nitrophenol | 70 | Endrin Aldehyde | 97.0 |
| Anthracene | 96.1 | Acifluorfen | 100 | Endrin Ketone | 98.0 |
| Azobenzene | 94.2 | Bentazon | 100 | gamma-BHC | 96.1 |
| Benzidine | 96.0 | Chloramben | 100 | Heptachlor | 97.5 |
| Benzo(a) Pyrene | 95.1 | Dalapon | 89 | Heptachlor Epoxide | 99.4 |
| Benzo(a) Anthracene | 97.7 | Dicamba | 100 | Methoxychlor | 96.6 |
| Benzo(b) Fluoranthene | 96.4 | Dichloroprop | 100 | | |
| Benzo(g,h,i) Perylene | 88.3 | Dinoseb | 100 | | |
| Benzo(k) Fluoranthene | 95.8 | MCPA | 100 | | |
| Benzoic Acid | 87.2 | MCPP | 100 | | |
| Benzyl Alcohol | 91.5 | Pentachlorophenol | 100 | | |
| Bis-(2-Chloroethoxy) Methane | 92.5 | Picloram | 96 | | |
| Bis(2-Chloroethyl) Ether | 83.2 | Silvex | 100 | | |
| Bis(2-Chloroisopropyl) Ether | 84.6 | | | | |
| Bis(2-Ethylhexyl) Phthalate | 97.8 | Organophosphorous Pesticides | | | |
| Butyl Benzyl Phthalate | 97.7 | Analyte | | Testing conducted by | |
| Carbazole | 100.0 | Chlorpyrifos | 98.6 | Keystone Laboratories, Inc. | |
| Chrysene | 99.0 | Coumaphos | 99.8 | Newton, Iowa | |

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