Minimate™ EVO System Quick Start Guide

Component information

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAPMPUNV</td>
<td>Minimate™ EVO System, 115V AC – 230V AC 50/60 Hz</td>
</tr>
</tbody>
</table>

System includes:
- MasterFlex® L/S variable speed pump with Easy – Load pump head
- VWR® stir plate
- 500 mL Reservoir with Lid, includes o-ring and fittings
- Drip Tray
- Pressure Gauges
- Adjustable Drip Tray feet
- Adapter Plug international, 100V-250V AC for pump (note: the plug does not change current)
- Power Adapter Plug, 100V-240V AC power supply, 12V DC input for stir plate.
- Fittings/Parts Bag:
  1. Male luer plugs (4)
  2. 3-way valve for reservoir (2)
  3. 1-way valve for reservoir Lid (2)
  4. Male luer lock-1/8” hose barb elbow (4)
  5. Male luer lock-1/8” hose barb (3)
  6. Male luer coupler (1)
  7. Female luer lock-1/8” hose barb (1)
  8. Pharmed ® tubing (2 ft.)
  9. Stir Bar (1)
 10. Minimate™ Capsule Stand (1)
 11. Screw for Minimate™ Capsule (1)
 12. Screw clamp for tubing (1)
 13. Sinker (1)
 14. Tubing clamps (8)

Minimate EVO Kits / Components Information

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>97008</td>
<td>Minimate™ EVO Reservoir Kit</td>
</tr>
</tbody>
</table>
|          | System includes:
|          | • Reservoir 500 mL with fittings
|          | • Lid with fittings and o-ring |
| 97009    | Minimate™ EVO Drip Tray Kit |
|          | System Includes:
|          | • Drip Tray with reservoir and filter capsule brackets
|          | • Pressure gages (2) with mounts and fittings
|          | • Minimate™ Capsule stand |
| 97010    | Minimate™ EVO Stir Plate Kit |
|          | System Includes:
|          | • VWR® Stir Plate
|          | • Power adapter plug, 100V-240V AC power supply, 12V DC input for stir plate |
| 97011    | MasterFlex® L/S Variable Speed Pump |
|          | System Includes:
|          | • MasterFlex® L/S variable speed pump
|          | • Adapter Plug international, 100V-250V AC for pump (note: the plug does not change current) |
| 97012    | MasterFlex® Easy Load Pump Head |
|          | System Includes:
|          | • MasterFlex® Easy Load Pump Head |
| 97014    | Minimate™ EVO Fittings Kit |
|          | System Includes:
|          | • 3-way valve for reservoir (2)
|          | • 1-way valve reservoir Lid (2)
|          | • Male luer coupler (1)
|          | • Male luer lock - 1/8” hose barb (3)
|          | • Male luer lock - 1/8” hose barb elbow (4)
|          | • Female luer lock - 1/8” hose barb (1)
|          | • Tubing clamps (8)
|          | • Pharmed ® tubing (2 ft.)
|          | • Screw clamp for tubing (1)
|          | • Male luer plug (4)

Figure 1: Cut Pharmed tubing (yellow) from Minimate EVO System to match lengths of tubing below (tubing in illustration are to length)
**Assemble System**

**Installation**

1. Verify all components have been provided. (See Tray Assembly and Fittings/Part Bag Figures on reverse side)

2. Cut Pharmed tubing (yellow) to lengths specified in Figure 1 shown on reverse side.

3. Slide tube clamps onto tubing and insert fittings into tubing as shown in Figure 1. Slide clamps over fitting ends and pinch together (use pliers if necessary to assist).

4. Lay drip tray on work counter. (Note: if there is any rocking of tray, the bottom feet can be adjusted by rotating as necessary as shown in figure 2).

5. Slide stir plate into left compartment of drip tray underneath reservoir bracket. Attach capsule stand on raised boss in center of drip tray with screw in threaded hole. Turn screw until snug fit, but allows the stand to move. (See Figure 3)

6. Connect 3-way valves to fittings on reservoir outlet and inlet. Attach male luer plugs onto female luer connectors on 3-way valves. (See Figure 4)

7. Place reservoir onto stir plate with outlet toward rear of plate. (See figure 5)

8. Connect "long tube" to 3-way valve at reservoir outlet and to fitting on rear gauge mount. (See figure 5)

9. Attach pump head onto pump with supplied screws. (See Figure 6)

10. Place tray in front of pump and insert tubing into open pump head, close pump head onto tubing. (See figure 7)

11. Attach male luer coupler to fitting on front of gauge mount. Attach Minimate Capsule feed port to coupler, rotate capsule to left into capsule stand and onto capsule bracket for support. (See figure 7)

12. Connect "mid-length" tube to fitting on rear of forward gauge mount and to retentate port on capsule filter. (See figure 7)

13. Connect "short tube" to fitting on front of gauge mount and to 3-way valve on reservoir inlet. Attach adjustable screw clamp to tube. Remove clamp when not in use, tubing can deform over time without fluid passing through tubing. (See Figure 7)

14. Cut a length of tubing from Minimate™ Capsule packaging long enough to reach filtrate collection vessel from filtrate port on filter capsule. Attach tubing clamp and female luer-1/8" hose barb to tube. Connect fitting to filtrate port and place open tube end into filtrate receiver vessel. (See Figure 8).

15. If performing diafiltration, place lid onto reservoir. Connect 1-way valves onto fittings on top of reservoir. From the Minimate Capsule filter packaging, cut a length of tubing to reach from 1-way valve on reservoir lid top to diafiltration vessel. Attach male luer-1/8" hose barb elbow and tubing clamp. Attach elbow to 1-way valve on lid and other tube end into diafiltration vessel, sinker at end of tube optional. (See Figure 8).

16. Plug pump cord into pump and power socket (international adapter plug is provided for international power sockets. Note: the plug does not change current).

17. Plug stir plate power plug into stir plate and power socket. (international adapter plug is provided for international power sockets. Note: for stir plate only)

**Operation**

- Confirm all fittings are secure prior to running liquid through system.
- Refer to VWR® stir plate operating manual for operation of stir plate. Use of reverse mode is not recommended on stir plate with Minimate EVO System. If stir bar stops rotating when increasing stir plate speed, reduce speed until stir bar is again spinning.
- Refer to MasterFlex® Pump and Pump Head manuals for use.
- Refer to Minimate Capsule Care and Use manual for operation of the TFF capsule.

Visit us on the Web at www.Pall.com/lab
Email us at LabCustomerSupport@Pall.com

©2020 Pall Corporation. Pall, PALL, and Minimate are registered trademarks of Pall corporation. VWR, Masterflex and Pharmed are registered trademarks. And TM indicates trademark registered in USA.