POOL FROG® Mineral Reservoir: Patented Mineral Pool Disinfectant Operational Instructions

Adopt a FROG® for Worry-Free Water!

- Less work with no daily dosing.
- Reduces chlorine use up to 50%.*
- Adopt an easier, more fun pool environment.

*Compared to the minimum EPA recommended chlorine level of 1.0 ppm for a stabilized swimming pool.

Water Balance Guidelines

<table>
<thead>
<tr>
<th>Element</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>7.2 – 7.8</td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>60 – 120 ppm</td>
</tr>
<tr>
<td>Calcium Hardness</td>
<td>150 – 400</td>
</tr>
<tr>
<td>Total Dissolved Solids</td>
<td>&lt;1500</td>
</tr>
<tr>
<td>Stabilizer</td>
<td>20 – 80 ppm</td>
</tr>
<tr>
<td>Free Chlorine</td>
<td>0.5 – 1.0 ppm</td>
</tr>
</tbody>
</table>

Swimming Pool Tips

1. Make sure the pool has adequate circulation. The pool water must completely circulate through the pump and filter at least 1 to 2 times per day. This usually requires 8 to 12 hours. Check with your dealer for the proper circulation time for your pool.

2. Before beginning with any pool care program, you must first balance your pool water. Take a water sample to your local pool professional who will test for the following important elements.

3. If your fill water is high in metals, use a sequestering agent or metal out at start-up only before using a mineral reservoir. See your local dealer for details on using these products and always follow manufacturers’ directions carefully.

4. After your pool is up and running smoothly, continue to test your water for pH, total alkalinity and chlorine with FROG® Brand Test Strips and maintain its balance by adding any necessary adjustment products (see your dealer for details).

5. Check the pool’s filter gauge often and periodically clean filter per the manufacturer’s directions. A dirty filter will slow the flow of water which could hamper proper circulation.

REPLACE EVERY 6 MONTHS OR AFTER ONE POOL SEASON, WHICHER IS SHORTER.
Replacing a POOL FROG® Mineral Reservoir, FROG BAM® and POOL FROG® Bac Pac or Chlorine Pac

Using the POOL FROG® Mineral Reservoir

1. Make sure you have the correct POOL FROG® Mineral Reservoir to fit your POOL FROG® Cycler. The colored barcode will indicate if it fits in ground versus above ground POOL FROG® Cyclers.

THE POOL FROG® MINERAL RESERVOIR MUST BE REPLACED EVERY 6 MONTHS OR AFTER ONE POOL SEASON WHICHEVER IS SHORTER.

2. IMPORTANT: Remove and read the inserted information card.

CAUTION read carefully - USE ONLY the factory recommended replacement POOL FROG® Mineral Reservoir, FROG BAM® and POOL FROG® Pac. DO NOT USE any other pac or bulk chemical tablets in the cycler. Use of any other product could result in damage to pool equipment or surface, unsafe pool conditions, fire or explosion. Warranty will be void if the correct POOL FROG® Mineral Reservoir, FROG BAM® and POOL FROG® Pac are not used.

3. Turn off pump and turn dial to Pac Removal, Setting 0 or OFF depending on the model.

4. Open mineral cycler cap. If using a chlorine pac stand back to avoid inhaling chlorine fumes.

5. Find slot on side of POOL FROG® Mineral Reservoir and line up with fin inside the cycler. Lower POOL FROG® Mineral Reservoir into cycler until secure.

6. Remove cap from FROG BAM® without removing seal.

7. Insert upside down into center of POOL FROG® Mineral Reservoir pushing down firmly on key to puncture seal.

8. Replace cap by hand only. DO NOT OVER TIGHTEN. Turn control dial on cycler to Maximum, Setting 5 or ON depending on the model.

9. Turn pump on for 90 minutes allowing FROG BAM® to circulate through pool.

10. To remove FROG BAM®, turn pump off, turn dial to Pac Removal, Setting 0 or OFF depending on the model, remove cycler cap.

11. Lift FROG BAM® up and allow any water in the container to drain through the cycler before recycling or discarding in trash.

NOTE: If water shows more than a hint of blue inside cycler, replace the cycler cap, turn dial to Maximum, Setting 5 or ON and run the pump for one minute.

11a. If pool size requires additional FROG BAM®, repeat steps 6-11.

11b. When water is clear in cycler, proceed to step 12.

USING FROG BAM® FOR AN ALGAE-PROTECTION GUARANTEE

(If not using FROG BAM®, proceed to #12.)

For a preventative dose, add one FROG BAM® for pools up to 15,000 gallons or two FROG BAM® for pools between 15,000 and 30,000 gallons.

See FROG BAM® product labeling for complete directions for use (EPA Reg.: No. 53735-9).

12. Chlorine pacs are recommended to assure up to 50% reduction in chlorine use.* Pacs sold separately. (EPA Reg. No.: 53735-2)

*Compared to the minimum EPA recommended chlorine level of 1.0 ppm for a stabilized swimming pool

Avoid sparks, open flame or smoking when handling a chlorine pac.

OPEN PAC

12a. POOL FROG® BAC PAC

For Bac Pac, remove colored tabs by grabbing on to the lip of one cap and pulling up until cap releases. Repeat the process for the other cap.

12b. POOL FROG® PAC 540C and 610C

For 540C and 610C pacs, find the indent in the plastic handle and cut using a 2” PVC cutter or hacksaw. Either way, make sure the blade comes straight across on the indent line for a clean cut.

If openings are pinched together, open with fingers or re-cut closer to the colored screens inside the POOL FROG® Pac. Leave at least 1/4” of plastic to fit into the POOL FROG® Cycler.

13. Invert Pac and shake until chlorine tablets fall into tower areas.
13. Invert Pac and shake until chlorine tablets fall into tower areas.

Start-up and Operation
POOL FROG® Mineral Reservoir with Start-up Water Polishers for easier start up.

14a. POOL FROG® BAC PAC
For Bac Pac, line up small leg with small opening in POOL FROG® Mineral Reservoir and large leg with large opening. Lower pac until secure.

14b. POOL FROG® PAC 540C and 610C
For 540C or 610C, line up the openings in the pacs with the keys in the POOL FROG® Chlorine Cycler.
Note: Openings are a different shape than keys. Lower pac until secure.

15. Replace cap by hand only.
DO NOT OVERTIGHTEN.

16. The chlorine pacs are made of HDPE plastic. Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Rinse thoroughly before recycling or discarding in trash.

17. Mark your calendar for the six month replacement of the POOL FROG® Mineral Reservoir, 90-day replacement of FROG BAM® and approximate replacement times for the POOL FROG® Pacs. Once wetted, the time-released mineral coating of this product is effective up to 6 consecutive months or one pool season whichever is shorter. After that time, even if you hear the spent media inside, it is no longer effective and must be replaced.

1. Add a stabilizer or conditioner to the pool at the beginning of the season if the stabilizer level is below 20 ppm. This will prevent chlorine burn off. Follow manufacturer’s directions carefully.

2. Shock the pool with an EPA registered chlorine shock to rid the water of all contaminants before beginning. Follow manufacturer’s directions carefully.

3. Install POOL FROG® Mineral Reservoir into the cycler. (See page 1 for directions.)

4. Replace cap and run cycler, with POOL FROG® Mineral Reservoir inserted, for 10 minutes on setting Maximum, Setting 5 or ON depending on the model.

5. Insert FROG BAM® into POOL FROG® Mineral Reservoir in cycler. (See page 1 for directions.)

6. When chlorine reading is down to 1.0 ppm, which may take a few days, insert chlorine pac. (See directions beginning on page 1.)

FOR IN GROUND MODELS
For In Ground models, cap removal is easier if using the tool included with the cycler. To loosen cap, hit the handle with the flat of your hand counter clockwise.
DO NOT USE CAP TOOL TO TIGHTEN CAP.
Start-up and Operation

This system is designed to work effectively with a variety of pool equipment as long as the following basic procedures are followed.

7. Setting Control Dial

Set control dial by matching up the parameters of your pool on the charts below. THIS IS A STARTING POINT ONLY and may need to be adjusted to fit your individual pool needs. See #8 for directions.

<table>
<thead>
<tr>
<th>Pool Size</th>
<th>8 HOUR PUMP RUN TIME</th>
<th>12 HOUR PUMP RUN TIME</th>
<th>24 HOUR PUMP RUN TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/2 hp</td>
<td>3/4 hp</td>
<td>1 hp</td>
</tr>
<tr>
<td>7,000 (18’)</td>
<td>5.0</td>
<td>4.5</td>
<td>4.0</td>
</tr>
<tr>
<td>9,000 (21’)</td>
<td>6.0</td>
<td>5.5</td>
<td>5.0</td>
</tr>
</tbody>
</table>

In Ground

<table>
<thead>
<tr>
<th>Pool Size</th>
<th>6 HOUR PUMP RUN TIME</th>
<th>12 HOUR PUMP RUN TIME</th>
<th>24 HOUR PUMP RUN TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3/4 hp</td>
<td>1 hp</td>
<td>1 1/2 hp</td>
</tr>
<tr>
<td>7,000</td>
<td>4.0</td>
<td>3.5</td>
<td>3.0</td>
</tr>
<tr>
<td>9,000</td>
<td>4.5</td>
<td>4.0</td>
<td>3.5</td>
</tr>
<tr>
<td>12,000</td>
<td>5.0</td>
<td>4.5</td>
<td>4.0</td>
</tr>
<tr>
<td>18,000</td>
<td>NR</td>
<td>5.0</td>
<td>4.5</td>
</tr>
<tr>
<td>25,000</td>
<td>NR</td>
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<td>5.0</td>
</tr>
<tr>
<td>30,000</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td>35,000</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td>40,000</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
</tr>
</tbody>
</table>

* – Bypass installation recommended.
NR – This pump size is not recommended for this size pool.

24 HOUR, LOW-SPEED PUMP-RUN TIME

In order to ensure proper performance when running on low speed for 24 hours or high speed less than 6 hours, bleed the air while the pump is on by unscrewing the cap knob until water appears. Then screw the knob back on. Repeat this process each time the cap is removed for any reason. Set the control dial at #6 and follow the adjustment directions in Step 8 to determine the correct setting for your pool.

8. For the first week test the pool water daily for free chlorine with FROG® Brand Test Strips to ensure correct dial setting. Continue to test weekly throughout the season.

After testing, adjust the dial up by 1/2 increment if the free chlorine reading has dropped below 0.5 ppm or down by 1/2 increment if the reading has risen above 1.0 ppm. Continue this process each day until the color on the test strip matches the ideal FROG® range of 0.5 ppm to 1.0 ppm chlorine.

Remember to adjust dial by 1/2 increments only, in order to prevent over chlorination which may bleach pool surfaces.

9. Shock pool every two weeks or as needed to maintain water quality. Follow label directions on the chlorine shock treatment used.

WARNING
Do not add shock in or near the skimmer or into the POOL FROG® Cycler as it could damage equipment, risk potential explosion or discolor your pool surface.

If using another means of chlorine - Follow steps 1-5 on Start-up and Operation and then continue below.

6. Maintain setting of Maximum, Setting 5 or ON depending on the model. No adjustments needed.

7. Maintain a minimum chlorine reading of 0.5 ppm with a chlorine delivery device or hand feeding.

8. Shock pool every two weeks or as needed to maintain water quality. Follow label directions on the shock treatment used.

WARNING
Do not add shock in or near the skimmer or into the POOL FROG® Cycler as it could damage equipment, risk potential explosion or discolor your pool surface.

U.S. Patents 6,210,566; 6,217,892; 6,383,507; 6,544,415; 6,551,609; 6,652,871 and other U.S. and Foreign Patents Pending. EPA Reg. No.: 53735-11
EPA Est. No.: 071209-AZ-001

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