Hot Tub Start-Up

1. Fill hot tub with fresh water. If using source water that is high in iron or other metals, see your dealer before filling the hot tub. It may require the use of a metal control product.

2. Clean or replace filter cartridge when dirty. (Follow manufacturer’s instructions).

3. Balance water by following STEPS a – d in order. IMPORTANT: Always follow printed instructions on the balancing chemical packages. Add balancing chemicals in small increments one at a time with the jets on and wait 6 hours before testing again and adding any additional balancing chemicals.

   a. Take a water sample from the hot tub and dip a FROG® Test Strip into it.

   b. Look at the Total Alkalinity reading first. Adjustments should be made to bring the Total Alkalinity in the range of 80 – 120 ppm prior to making any adjustments to pH even if it throws pH off further.

   c. After Total Alkalinity is in range, test for pH. It should be between 7.2 and 7.8. If higher or lower, add a pH adjuster.

   d. Lastly test for Calcium Hardness. It should be between 150 and 250 ppm. If higher, partially drain the hot tub (about 6 inches) and fill with water low in calcium. If lower, add Calcium Increaser. If balancing takes longer than 2 days shock the water and maintain a chlorine level while continuing balancing.

   e. If water is cloudy: Check water balance. Ensure pH, Total Alkalinity and Calcium Hardness are correct.

Troubleshooting Most issues are caused by improper water balance or sanitizer levels.

If water is cloudy:

1. Check water balance. Ensure pH, Total Alkalinity and Calcium Hardness are correct.
2. Make sure your bromine or chlorine levels are at least 1.0-2.0 ppm.
3. Make sure your FROG Filter Mate is not older than 4 months as it will be ineffective after that time. If unit is too tall, cut off hash marks to shorten.

Installing FROG Filter Mate

1. Set reminder dial on FROG Filter Mate to 4 months from month of installation. Turn dial by hand or with a coin if needed.
2. Place FROG Filter Mate in one of the following locations in hot tub:
   - Diagram A: Majority of Hot Tubs
   - Diagram B: High Flow Hot Tubs In Filter Well
   - Diagram C: Small Cartridge or Other Hot Tubs

   a. Insert FROG Filter Mate inside filter cartridge core.
   b. If FROG Filter Mate is inside a stand-pipe, attach a string to the FROG head handle for easy removal.
   c. Do not allow FROG Filter Mate to sit too low in the filter. If blocking water flow, install in filter well (Diagram B).
   d. On skimmer filters with 2.5 HP or larger pump motors, place FROG Filter Mate in filter well outside the filter cartridge.

   If unit is too tall, cut off hash marks to shorten.

Regular Hot Tub Care

1. Drain and refill hot tub as directed by your hot tub manufacturer or every 4 months when FROG minerals need to be replaced.
2. Run filtration system a minimum of three hours per day.
3. Regularly test water for pH, Total Alkalinity and bromine or chlorine levels.
4. Maintain at least 1.0 ppm bromine or chlorine level at all times. Note: Bromine and chlorine levels are lower only when used with FROG minerals.
5. Shock the hot tub once a week or as needed. Additional shocking may be required if the hot tub is under heavy use.
6. FROG Filter Mate must be replaced every 4 months. After four months of use when draining and refilling the hot tub with fresh water, discard the FROG Filter Mate in trash even if, upon shaking, it appears there is spent media inside. Once wetted the time released minerals are effective up to four months. Non-refillable product. Do not reuse or refill this container. Do not attempt to reuse the product once removed from the hot tub.

Water Balance Guidelines

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>7.2 – 7.8</td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>80 – 120 ppm</td>
</tr>
<tr>
<td>Calcium Hardness</td>
<td>150 – 250 ppm</td>
</tr>
<tr>
<td>Total Dissolved Solids</td>
<td>&lt;1500</td>
</tr>
</tbody>
</table>

Product Description:
FROG Filter Mate is a disinfectant that contains a patented mineral formula that destroys bacteria while neutralizing acids, which helps keep the pH in an acceptable range with less monitoring. Using the FROG Mineral System+ with reduced levels of bromine or chlorine improves hot tub pleasure by reducing the problems associated with bromine or chlorine including faded bathing suits, premature damage to hot tub equipment or surfaces and smelly odors. FROG Filter Mate must be used in conjunction with an EPA regulated bromine or chlorine hot tub product or a bromine or chlorine delivery device.

Active Ingredients:
- Silver Chloride ........ 0.5%
- Other Ingredients ........ 99.5%

Net Wt.: 58 grams

EPA Est. No.: 071209-AZ-001

**WARNING** It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Learn more at frogproducts.com