**SmartChlor™ Cartridge**

**Active ingredients:**
- 1,3-dichloro-5,5-dimethylhydantoin... 81.1%
- 1,3-dichloro-5-ethyl-5-methylhydantoin 18.9%

**Other ingredients:**
- 0.0%

**Keep Out of Reach of Children**

**DANGER**

**SEE PRECAUTIONARY STATEMENTS ON BACK PANEL**

**FIRST AID:**
- If In Eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water. Do not induce vomiting unless told to do so by the poison control center or doctor.

**If Swallowed:**
- Call poison control center or doctor immediately for further treatment advice.
- Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**If Inhaled:**
- Move person to fresh air.

**If Not Breathing:**
- Give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**Note to Physician:**
- Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression, and convulsion may be needed.

**IN CASE OF MEDICAL EMERGENCY CALL:**
- 1-800-434-9383

**Product Description:**
- The SmartChlor Cartridge is a revolutionary way to maintain a low level of chlorine in hot tubs. It uses the SmartChlor™ Cartridge with the SmartMiner Cartridge in the SmartChlor System. At least 0.2 ppm of chlorine is required to ensure proper disinfection and water balance.

**Usage:**
- **SmartChlor™ Cartridge**
  - **Universal**
  - **For Hot Tubs**

**Handling:**
- **To Avoid Dispersing Small Particles of Chlorine:**
  - **When the SmartChlor Cartridge is removed from the hot tub:**
  - **For 15 minutes or longer:**
  - **After the SmartChlor Cartridge is replaced:**

**Precautionary Statements:**
- **To Minimize and Domestic Animals:**
- **DANGER**: Corrosive. Causes irreversible eye and skin damage. May be fatal if swallowed. Irritating to nose and throat. Avoid breathing dust and fumes. Do not get in eyes, on skin or on clothing. Wear eye, mouth, and nose and respiratory equipment when handling product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

**Physical and Chemical Hazards:**
- **STRENGTHENS GOUGING AGENT:** Do not mix with other chemicals.
- **May Only Be Used with a SmartChlor Cartridge:** Always add product to large quantities of water. Use dry chlorine tablets.

**Toxicity:**
- **To Avoid Dispersing Small Particles of Chlorine:**
  - **When the SmartChlor Cartridge is removed from the hot tub:**
  - **For 15 minutes or longer:**
  - **After the SmartChlor Cartridge is replaced:**

**National Uniform System for Public Health Laboratories:**
- **For the Control of Public Health Laboratories:**
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In-Line Sanitizing System
Operating Instructions

Congratulations!
Your hot tub came with a complete mineral and chlorine sanitation system. When using the patented @ease™ Mineral Cartridge with the proprietary @ease™ SmartChlor™ Cartridge, you'll enjoy your hot tub more with less work and less chlorine.

Less Work Because:
- The @ease Mineral System+ continuously works to control bacteria for four full months.
- Cartridges last longer to eliminate daily maintenance.
- Cartridges are pre-filled for no measuring or mess.
- Simply adjust to your setting and relax for weeks.

Less Chlorine Because:
- With minerals in the water, chlorine use is cut by up to 75%*.
- It's precisely metered over 3 to 4 weeks so it lasts longer than daily spoon feeding.
- With minerals and low levels of chlorine, the water feels softer.
- The system reduces odors and leaves the water crystal clear.

You're going to love your @ease System. If you have any questions, contact our Customer Service Representatives at 800-222-0169.

+ @ease System consists of the FROG® minerals silver chloride and carbonate used with 0.5 ppm of @ease SmartChlor Cartridge. The @ease Mineral Cartridge must be used in conjunction with the @ease SmartChlor Cartridge (EPA Reg. No. 53735-14).
* Compared to the minimum ANSI recommended chlorine level of 2.0 ppm for a hot tub.
The Complete In-Line System
The In-Line System is made up of (A) a cap that is easily distinguishable among the fittings on the top of the hot tub, (B) a cartridge holder that pulls out of the system, (C) a mineral cartridge that helps control bacteria in the water and (D) an @ease SmartChlor Cartridge that helps support the minerals while oxidizing contaminants like body oils and ammonia compounds responsible for smelly chloramines. The cartridges are adjustable to meet your specific hot tub water care needs.

Start up
Follow all directions from your hot tub manufacturer on filling and balancing the water in your hot tub. Standard guidelines for balancing the water are as follows:

- Use @ease Test Strips that came with your kit to routinely check your pH, Total Alkalinity and Calcium Hardness. Once the SmartChlor Cartridge is in the system, it will maintain the free chlorine level of 0.5 to 1.0 ppm. pH is affected by bather load, chemical usage, evaporation and the make-up of your source water.
- Use a metal out or sequestering agent if fill water is high in metals. Wait 24 hours before continuing start up.
- Very Important! Before using cartridges, establish an initial residual of 0.5 -1.0 ppm free chlorine with FROG® Jump Start® start-up shock, that came in this package, that quickly dissolves with an effervescent fizzing action – one packet per 500 gallons. Do not use a non-chlorine shock as it cannot establish a chlorine residual. Do NOT add through the In-Line System.
- When hot tub reaches operating temperature per your hot tub manufacturer’s directions, remove the shrink wrap from both cartridges. Set the @ease Mineral and SmartChlor Cartridges according to directions on page 3-4 and insert them into the System.
- Begin regular hot tub care procedures as soon as start-up is complete.

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</td>
</tr>
<tr>
<td>Total Dissolved Solids</td>
<td>&lt;1500</td>
</tr>
<tr>
<td>Free Chlorine</td>
<td>0.5 – 1.0 ppm</td>
</tr>
</tbody>
</table>

*NOTE: Free chlorine levels are reduced up to 75%* when using @ease minerals.
Replacing Cartridges

- Open cap of In-Line System and set aside.
- Remove holder by pushing down and turning counterclockwise before pulling out.
- Remove spent cartridges by pushing bottom out through openings in back of holder. Then grab cartridge and pull out.
- Snap the @ease Mineral Cartridge into the area marked “Minerals” (top portion) and the @ease SmartChlor into the area marked “Bromine or SmartChlor” (bottom portion) making sure to line up the indentation at the top of the cartridges with the raised area on the holder.

- Slowly insert holder into system (see diagrams). Line up holder arrow-1 with system arrow-2. Push down until holder tabs-3 go past system tabs-4 and turn holder to the right (clockwise) until it stops. To ensure a locked position, attempt to pull holder up. If it stays in place, the lock is secure.

Adjusting and When to Replace @ease Mineral Cartridge:

- The @ease Mineral Cartridge must be replaced every 4 months. After four months of use, or when draining and refilling the hot tub with fresh water, discard @ease Mineral Cartridge in trash even if, upon shaking, it appears there is spent media left inside. Once wetted the time released minerals in the cartridge are effective up to four months. Do not attempt to reuse the product once removed from the hot tub. (See hot tub manufacturer’s draining recommendations.)
Adjusting & When to Replace @ease SmartChlor Cartridge:
The @ease SmartChlor Cartridge will maintain a low 0.5 to 1.0 ppm chlorine level as long as the pH stays within 7.2 and 7.8 so there is little need to adjust the cartridge setting.

Begin with an initial setting based on chart below.

Initial Start-Up Settings

<table>
<thead>
<tr>
<th>Daily Filter Time</th>
<th>Hot Tub Size (gallons)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>250-300</td>
</tr>
<tr>
<td>One hour</td>
<td>2</td>
</tr>
<tr>
<td>Two hours</td>
<td>2</td>
</tr>
<tr>
<td>Four hours</td>
<td>1</td>
</tr>
<tr>
<td>24 hour @ low flow</td>
<td>1</td>
</tr>
</tbody>
</table>

If the chlorine reserve (total) reading is lighter than the color on the bottle, check the cartridge as it may be empty.

The @ease SmartChlor Cartridge needs to be replaced when empty. Drain water from the cartridge and ensure it is empty before discarding in trash or offering for recycling. On most hot tubs, it will last between 3 and 4 weeks. Always maintain at least 0.5 ppm free chlorine level.

Regular Hot Tub Care Procedures: Always follow the directions for operating your particular hot tub.

- Run filtration system as directed by your hot tub manufacturer to maintain proper water flow through the @ease In-Line System or at least 3 hours per day.

- Periodically test water for pH, Total Alkalinity, Calcium Hardness and chlorine levels with the precise @ease Test Strips that include special directions for using with @ease products.

The @ease SmartChlor Cartridge forms a chlorine reserve that is measured as total chlorine on a standard test strip/kit. This chlorine reserve readily shifts to free chlorine as needed to maintain our recommended low level of chlorine. Based on average hot tub usage, chlorine will last about 3-4 weeks for hot tubs of 400 gallons.

- Shock the hot tub with a non-chlorine shock when you replace the @ease SmartChlor Cartridge or once a month or if the water looks cloudy. With @ease SmartChlor, far less shocking is required compared to standard water treatments that require weekly shocking or shocking after every use.

- Remember to replace your @ease Mineral Cartridge and @ease SmartChlor Cartridge as directed under “Adjusting and When to Replace.”

- Lubricate o-ring twice a year with a silicone lubricant.
Frog

@ease
SMARTCHLOR™ CARTRIDGE

Use only with the @ease MINERAL CARTRIDGE in the @ease Floating Sanitizing System for weeks of low level sanitation.

UP TO 75% LESS CHLORINE* 
LASTS 3-4 WEEKS

@ease REPLACEMENT SMARTCHLOR™ CARTRIDGE
BOB 222 0169
KINGTECHNOLOGY.COM

Keep Out of Reach of Children.
DANGER
Floating Sanitizing System Operation Instructions

This is not a toy. For sanitizing hot tubs only!

Welcome to Fresh Mineral Water® with SmartChlor™ Technology courtesy of FROG®. This hot tub water care system+ destroys bacteria to keep your hot tub clean with less work and up to 75% less chlorine.*

There are two cartridges – the top one holds our patented mineral formula while the bottom one has a different kind of chlorine that is smart about when it’s needed and when it’s not. Simply connect the two cartridges and toss into the hot tub. Everything is pre-filled and contained for no mess, no guess and no stress hot tub care. The best part is it flips over when it’s time to replace the chlorine cartridge.

Register your @ease™ Floating Sanitizing System at KingTechnology.com

Hot Tub Start Up

• Always drain and refill hot tub at least every 4 months. If previously using bromine and switching to @ease SmartChlor, you must drain and refill your hot tub first. If previously using dichlor you may convert to SmartChlor without having to drain the hot tub.

• Clean and replace filter cartridges when dirty (Refer to manufacturer’s instructions).

• Use @ease™ Test Strips included in the package to balance your pH, Total Alkalinity and Calcium Hardness according to the Water Balance Guidelines. This hot tub system will maintain the free chlorine level of 0.5 to 1.0 ppm, pH is affected by bather load, chemical usage, evaporation and the make-up of your source water.

• Heat water to recommended temperature before using cartridges.

• Very Important! Before using cartridges, establish an initial residual of 0.5 - 1.0 ppm free chlorine with FROG® Jump Start™ start-up shock, included in this package, that quickly dissolves with an effervescent fizzing action – one packet per 500 gallons.

Using the @ease Floating System

1. Remove outer packaging from both the mineral and chlorine cartridges and while holding the @ease SmartChlor Cartidge over the hot tub, remove the protective seal and allow any loose particles to fall into the water.

2. Bring the two cartridges together and line up the arrows. Push together and twist to lock.

3. Once set, simply toss it into the hot tub.

4. Follow regular hot tub water care procedures below.

Replacing the @ease SmartChlor Disinfectant Cartridge

When the product is almost empty, it will slowly flip over giving you notice that it’s about time to replace the @ease SmartChlor Cartidge. If it stays on its side longer than a day or two, pull unit out of the water and let it drain. Reset it in the water to see if it flips completely.

When it completely flips over replace by rotating the two cartridges until the arrow on the @ease SmartChlor Disinfectant Cartridge aligns with the unlock symbol on the @ease Mineral Cartridge and pull apart. Follow “Using the @ease Floating System” directions for attaching a new chlorine cartridge.

Do not remove the @ease SmartChlor Cartidge until the system has completely flipped. If the chlorine cartridge still contains a small amount of chlorine the system has flipped over, place in the hot tub until completely empty. Do not allow the @ease SmartChlor Cartidge to sink to the bottom or bleach of the hot tub surface could occur. When completely empty, discard in trash or offer for recycling.

Regular Hot Tub Care

1. Run filtration system as recommended by your hot tub manufacturer or at least 3 hours per day.

2. Periodically test the water for pH, Total Alkalinity, Calcium Hardness and chlorine levels with the precise @ease™ Test Strips that include special directions for using with these products. The @ease SmartChlor Cartidge forms a chlorine reserve that is measured as total chlorine on a standard test strip/kit. This chlorine reserve readily shifts to free chlorine as needed to maintain our recommended low level of chlorine. Based on average hot tub usage, chlorine will last about 3-4 weeks for hot tubs of 400 gallons.

3. Shock the hot tub with a non-chlorine shock when you replace the @ease SmartChlor Cartidge or once a month or if the water looks cloudy. With @ease SmartChlor Cartidge, far less shocking is required compared to standard water treatments that require weekly shocking or shocking after every use.

4. Replace the @ease SmartChlor Cartidge when the system flips over. Replace the complete @ease Floating System every four months or when draining and refilling the hot tub. Even if, upon shaking the mineral cartridge, it appears there is spent media left inside, once wetted the time released minerals in the cartridge are effective up to four months.

NOTE: This product may be removed from the hot tub when in use. Lift out of the water and let drain into the hot tub. Then place on any surface that is not susceptible to bleaching from the chlorine. Remember to replace the product once exiting the hot tub.

* @ease System consists of the FROG minerals silver chlorides and carbonates used with 0.5 ppm @ease SmartChlor Cartidge. The @ease Mineral Cartidge must be used in conjunction with the @ease SmartChlor Cartidge (EPA Reg. No. 5775-14).
* Compared to the minimum ANSI recommended chlorine level of 2.0 ppm for a hot tub.

King Technology, Inc. 530 11th Ave S, Hopkins, MN 55343
@ease™ Mineral Cartridge

Active Ingredient:
Silver Chloride .......... 0.5%
Other Ingredients: .... 99.5%
Total: .................... 100.0%

EPA Reg. No. 53735-11
EPA Est. No. 71209-AZ-001

KEEP OUT OF REACH OF CHILDREN
CAUTION

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

Directions for Use: For use in hot tubs up to 600 gallons. Use with the @ease SmartChlor Cartridge. Ensure all hot tub equipment is working properly. Operate the pump and filter for at least 3 hours per day. Clean filter following manufacturer’s directions. May be used with a previously filled hot tub unless it was sanitized with bromine. Then drain and fill the hot tub with fresh water.

Start-up: Balance the water according to the water balance guidelines with pH between 7.0 – 7.8 and total alkalinity at 80 to 120 ppm. Establish a free chlorine residual of 0.5 to 1.0 ppm in the hot tub with Frog Jump Start start-up shock or an EPA approved hot tub chlorine shock following the directions for that product. When using other products as outlined in directions for this product, always follow directions on those products.

To assemble:
- Remove outer packaging
- Peel off protective seal from the flat part of the @ease SmartChlor Cartridge
- Align arrows on blue mineral cartridge and silver chlorine cartridge
- Push together and twist to lock
- Set the dial on the chlorine cartridge (see Setting Chart in manual)
- Place entire system in the hot tub water.
- Shock the hot tub when replacing an @ease SmartChlor Cartridge or once a month

Replacing the Cartridges: Replace the @ease SmartChlor Cartridge when the system flips over. Follow label directions carefully. After four months or when draining and refilling the hot tub, replace the @ease System.

@ease™ SmartChlor™ Cartridge

Active Ingredients:
1,3-dichloro-5, 5-Dimethylhydantoin.........81.1%
1,3-dichloro-5-ethyl-5-methylhydantoin ......16.1%
Other Ingredients: .................................. 2.8%
Total: ........................................... 100.0%

EPA Reg. No. 53735-14
EPA Est. No. 71209-AZ-001

KEEP OUT OF REACH OF CHILDREN
CAUTION

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- Peel off protective seal from the flat part of the @ease SmartChlor Cartridge
- Align arrows on blue mineral cartridge and silver chlorine cartridge
- Push together and twist to lock
- Set the dial on the chlorine cartridge (see Setting Chart in manual)
- Place entire system in the hot tub water.
- Shock the hot tub when replacing an @ease SmartChlor Cartridge or once a month

Replacing the Cartridges: When the system flips over, replace the @ease SmartChlor Cartridge by rotating the two cartridges until the arrows align and pull apart. Drain the water from the old @ease SmartChlor Cartridge and shake slightly to see if it is empty. Follow disposal instructions and replace with a new @ease SmartChlor Cartridge. Do not discard or recycle cartridge if a small amount of chlorine remains. Place in the hot tub to float on its own until completely empty

- Keeping the pH in the proper range of 7.2 to 7.8 will allow the @ease SmartChlor Cartridge to keep the free chlorine level between 0.5 and 1.0 ppm with little adjusting.
- With the @ease SmartChlor Cartridge less shocking is required because it maintains a consistent level of sanitization even when people enter the hot tub.

REENTRY into treated hot tubs is prohibited above levels of 5 ppm available free chlorine as measured by a suitable test kit due to risk of bodily injury.