



## Water Care Made Simple for Hot Tubs

*Most all PDC Spas hot tubs are standard with our exclusive EverPure™ ozone purification system. Luxury Series units are offered with the EverPure2™ system of ozone and UV-C as an optional feature. All swim spas feature the EverPure2™ standard. A quick glance at the indicator lights assures these systems are hard at work; relax and be confident your water is crystal clean.*

**Filtration Setting:** Upon initial start-up and after each water change, set filtration cycle for 24 hour duration. For regular use, it is recommended the cycle be set for no less than 12 hours per day.

Owners using the AquaFinesse or **ecoone** proprietary water treatment systems, follow kit instructions regarding their recommendations. The ecoone system maintains water balance of alkalinity and pH assuring far less use of harsh chemicals for maintenance. Both systems use granulated dichlor as the additional sanitizing agent partnering with the EverPure and EverPure2 on the PDC Spas hot tubs and swim spas.

**Initial Fill / Refill:** Clean the shell with an approved cleanser. Fill with a hose preferable using the Hose Filter from **ecoone** to remove organic and metal contaminants in both city and well water, further reducing the need for additive chemicals. Assure the filter is clean.

**Testing:** Upon initial start-up and on a regular basis, test with strips and follow container instructions.

**Alkalinity:** Upon initial start-up and after each water change, balance the alkalinity after test strip reading. *Alkalinity Up* if measure is low, and *PH Down* if measure is high. There is no need to readjust on a regular basis unless water becomes cloudy or if considerable amount of water has been added (topped off).

**PH Balance:** A balanced PH should be maintained at all times, adjust per test strip reading. Use a PH Down agent when reading is high, PH Up agent when reading is low.

**Clarifying:** Cloudy water is normally caused by a dirty filter. Clean the filter and replace, increase sanitizer level, increase filtration time. Check pH and alkalinity, use the AquaFinesse or **ecoone** method on the recommended regular schedule to maintain clear, clean water.

**Sanitation: EverPure™ and EverPure2™ sanitized hot tubs:** A granulated dichlor sanitizer, is recommended. Broadcast granules; one capful, twice a week for units with the ozone EverPure™ system. One capful once a week for hot tubs with EverPure2™ and one to two capfuls once a week for swim spas. This is a recommended amount and is dependent on the number of users and frequency of use.

**Bromine sanitized hot tubs:** (*Older hot tubs may utilize a bromine based sanitation method*) Use a shocking agent, a non-chlorine product designed to effectively work with bromine residual. It is recommended 1 1/2 oz. per 500 gallons at initial start-up and thereafter 3/4 oz. weekly. Maintain a bromine level of 2-6 ppm.

Avoid using BaquaSpa, any biguanide, trichlor or copper based algaecide as these will cause component damage and void warranty.

**Foaming:** often caused by detergents / soaps in the system from bathing suits, body lotions. It is recommended to rinse off prior to using the unit. Use a filter cleanse to clean the filter cartridge, turn on jets / blower and scoop out foam. Replace clean filter, increase filter time schedule, increase sanitizer level, check pH and alkalinity.

**Filter Cleanse:** On a regular basis or if cloudy water is a concern, follow the filter change procedure in the Owner's Manual, soak the cartridge in an approved filter cleanser rinsing from inside out with a hose. It is recommended to have an extra cartridge during the cleaning routine to keep your unit in operation.

**Acrylic Shell Cleanse:** During a routine water change, it is recommended to wipe clean the acrylic surface with a acrylic cleaner approved for hot tubs and swim spas. Never use household cleaners as they may damage the finish and plumbing and void warranty.

Before using chemicals, read the labels and follow directions carefully. Always add the chemicals directly to the hot tub water, either in a suitable feeder, distributed over the water surface, or poured into the water, preferably with the pump on.

Never add chemicals to the water while persons are using it.

Leave the cover off and circulate the water for at least 15 minutes after adding chemicals to effectively distribute the chemicals and allow odors to escape.

## Proper Handling of Chemicals

Keep all chemicals out of the reach of children.

Always keep lids on chemicals when not in use and store in a cool, dry location away from direct sunlight.

Do not store chemicals within the interior of the swim spa cabinet.

Do not interchange caps or measuring scoops for different types of chemicals.

Do not smoke around chemicals. Some may emit highly flammable fumes.

In case of contact or if a doctor is required, bring the chemical container to medical authorities for proper treatment.

Never use swimming pool chemicals in your swim spa. This may void the warranty.

Never mix chemicals or chemical solutions directly with each other.

<b>Troubleshooting Reference</b>		
<b><u>Symptom</u></b>	<b><u>Probable Cause</u></b>	<b><u>Suggested Correction</u></b>
Cloudy Water	High total alkalinity levels, High pH levels, High calcium hardness. Algae growth, low sanitizer levels, high user load, pets, rain. Overuse of defoamer.	Test levels and make correcting adjustments.
Colored Water	Red-Brown; overall imbalance Blue-Green; high pH level.	Brown-Red; Test pH, alkalinity and calcium hardness. Drain and refill if necessary. Blue-Green; Test pH and make adjustments.
Foaming	Low calcium hardness. Build up of soaps, lotions, organic matter, etc.	Raise calcium hardness level. Increase sanitation dichlor. Replace filter. Drain if necessary.
Skin/Eye Irritation	pH level imbalance. Low sanitizer level.	Test pH, alkalinity and sanitizer levels. Make adjustments. Shock if necessary.
Stains at Waterline, Pillows, etc.	Low alkalinity, pH levels.	Adjust pH and alkalinity. Drain, clean off stained areas, change filter and refill.
pH Fluctuation	Low alkalinity levels.	Test alkalinity level and make adjustments.
pH Resistance	High alkalinity levels.	Test alkalinity level and make adjustments.
Sanitizer Inefficiency	High pH and/or alkalinity level.	Test both levels and make adjustments.
Scale Formation	High pH, calcium hardness and/or alkalinity levels.	Test all levels and make adjustments. Drain and refill if necessary.
Algae Formation	Low sanitizer level.	Clean spa walls, add algaecide*, add shock.
Corrosion in Fittings and Components	Low pH and/or alkalinity levels. High chlorine level.	Test all levels and make adjustments. (This build-up may cause operation failure and void warranty.)