# <u>Congratulations on your purchase of the amazing</u> <u>"MoneySaving" SolarChlor Unit!</u>

SolarChlor is the solution to the rising prices of chemicals and energy and is the perfect compliment to your backyard oasis and the environment.

Let's first discuss the safety precautions of your SolarChlor unit before getting started.

#### Important Safety Tips

- SolarChlor is NOT a lifesaving floatation device and is NOT to be floated on or used as a floatation device.
- Do NOT dive onto, jump onto or otherwise abuse your SolarChlor unit. SolarChlor is a sophisticated device and should be treated as a floating chlorinator. To avoid incident, please remove unit from the pool if and when safety is an issue.
- SolarChlor does not correct poor filtration or circulation problems with your swimming pool.
- SolarChlor does not balance your pool water chemistry.
- SolarChlor will not turn green pools back to clear. Please consult a pool professional. Please clean or rid algae problem prior to use.
- SolarChlor is not compatible with Biguanide products. Please consult with a Biguanide dealer for instructions on how to remove this product from your pool prior to using SolarChlor.
- Avoid scratching or scaring the solar panel on your SolarChlor unit. To clean the surface of the Solar Panel, please us a non-abrasive soap and sponge. Avoid using stringent chemicals and abrasive cleaners as this will void the warranty and restrict output.
- SolarChlor is waterproof and water resistant. However, the unit should not be submerged in water for any length of time, as this will void the warranty.
- Do NOT submerge the SolarChlor unit into any other solution or liquid other than the swimming pool water. This practice may emit or generate poisonous gases and will void warranty.
- The use of metal sequestering agents will hinder the benefits of what SolarChlor is producing to inhibit algae growth. An EDTA based agent is suggested if you are concerned with scale build-up or staining.
- Remove SolarChlor unit from the pool during freeze conditions.
- Keep SolarChlor unit in a well-circulated area of the pool. Advise against swim-outs, beach entries, tanning ledges, skimmers, etc.
- Tethering the SolarChlor unit is at owner's discretion and we recommend using safety entanglement precautions as not cause injury or drowning. We recommend that the unit be tethered.
- Do Not use SolarChlor unit in any other method than the method it was intended or instructed as this may cause injury. This product is intended for swimming pool or spa use only.
- Do Not fill cell housing with anything other than regular salt (NaCL).
- Do Not fill anode housing drawer or bottom "boost" cap with any other chemical other than salt (NaCL). Rock salt is recommended for anode drawer and bottom boost cap assembly, as it dissolves slowly. Consult local pool store for proper salt for pool. This can either be rock salt, salt pellet or granular. Do not use salt containing yellow prussiate of soda or magnesium based.
- Please ensure that all water is drained from the unit prior to extracting from the pool. This is easily achieved by turning SolarChlor unit parallel to the pool water.
- Do Not bend, scrape, or otherwise deform or damage the cell plates or solar panel. These actions will
  affect the performance of the unit and void the warranty.
- Do Not stick metallic or non-metallic objects into or around cell housing or between cell plates as this will
  affect the on-board electronics and void the warranty.
- SolarChlor is not recommended for commercial use. This use will void the warranty.
- Remove SolarChlor unit prior to covering the pool or in freezing conditions.
- Salt water is more corrosive than fresh; appropriate care of deck and coping should be taken to ensure longevity.
- Approved deck sealant is highly recommended twice a year.

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#### SolarChlor Limited Warranty

The SolarChlor limited warranty applies only to the original owner, as the warranty is non-transferable. Under this limited warranty our sole obligation is limited to the repair or replacement of the SolarChlor unit or one of its parts. Shipping will be the responsibility of the owner. All other warranties, expressed or implied, including the implied warranty or merchantability are hereby disclaimed.

- The manufacturer hereby warrants the SolarChlor unit to be free of defects in material and workmanship for a
  period of one (1) year from the date of purchase. Proof of purchase and/or warranty registration must be on file
  with Marrick Enterprises, Inc. or must be sent in with the unit.
- In the second year from date of purchase the SolarChlor unit will be replaced for payment of 50% of the current retail price less shipping and handling fees.
- In the third year from date of purchase the SolarChlor unit will be replaced for a payment of 75% of the current retail price less shipping and handling fees.

#### Exclusions from Limited Warranty for SolarChlor

The SolarChlor unit is designed for residential swimming pools only. Use in any other manner will void the warranty. If the SolarChlor unit is used in any application other than its intended use for chlorinating swimming pool water, the purchaser or end user releases the manufacturer from any and all claims related to use of the SolarChlor unit and agrees to indemnify the manufacturer from any claims related to improper or non-authorized use.

The SolarChlor warranty does not cover failure to follow all safety instructions or precautions, user's or owner's negligence in part or whole and/or problems arising from misuse, abuse, accident, improper application, improper chemicals, improper maintenance and/or installation, Acts of God, damage from pets, plants or other animals, abnormal weather conditions, abnormal handling, and dismantling the SolarChlor unit in any manner including but not limited to bending, scratching, scrapping, shorting out, or chemical destruction of the cell plates and/or solar panel misuse.

This warranty specifically excludes all incidental or consequential damages. State laws may vary from state to state and this limited warranty gives you specific rights.

Warranty must be mailed in within 60 days of purchase accompanied by a copy of the purchase receipt. Under this limited warranty, only the original purchaser may submit a claim. All claims must be submitted with the part to be warranted.

#### SUBMISSION OF WARRANTY CLAIMS AND WARRANTY REGISTRATION CARD:

Claims can be mailed to: Marrick Enterprises, Inc. Attn: SolarChlor Warranty Dept. P.O. Box 1909 Spring, Texas 77383-1909

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\*\*\*Do not return your SolarChlor unit to the merchant. Contact our service department at SolarChlor.com or call 713-401-4121 for assistance or warranty claims.

# SolarChlor Warranty Registration Card

| Customer Name:     |      |            |                     |                                  |
|--------------------|------|------------|---------------------|----------------------------------|
| Mailing Address:   |      |            |                     |                                  |
| City:              |      | State:     |                     | Zip:                             |
| Telephone ( )      |      |            | E-Mail:             |                                  |
| Purchase Date      | 1    | 1          | Purchased From:     |                                  |
| Type of Pool:      |      |            |                     | Gallons/Liters                   |
|                    | A    | bove Grour | d / In Ground       |                                  |
| Existing Salt Pool | `    | Yes/No     |                     |                                  |
| ****This warranty  | card | l must be  | sent in within 60 d | ays of purchase date accompanied |
| with a copy of the | pu   | chase re   | ceipt               |                                  |

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- 1.) Float the SolarChlor unit in the pool on a daily basis.
- 2.) Check water chemistry at least twice a week. Keep free chlorine level at or above .5ppm and the copper level under 1.3ppm.
- 3.) Do not use a metal sequestering agent in your pool, as this will eliminate the precious minerals that keep the water clear. If concerned with metal staining or calcium build-up please use an EDTA based product such as "Ionizer Stuff" from Jack's magic.
- 4.) Monitor water chemistry regularly and adjust PH down by adding muriatic acid (HCL) as needed. Pour recommended amount of acid around perimeter of pool with pump running. Do not use PH decreaser (sodium bisulfate) in granular form or liquid, as this will neutralize the chlorine level.
- 5.) Keep the filtering system clean and the water chemistry balanced to ideal levels.
- 6.) Maintain 50% skimmer and 50% main drain operations and run pump on a daily basis. Pump system can be reduced by as much as 50% but must be done gradually. Your pool water will cloud if you have reduced the run time too much. When this occurs, shock your pool and increase the run time of your pump.
- 7.) Shock the pool water on a weekly basis or as needed, depending on use, weather, or season. If a deviation between the free chlorine and total chlorine is detected in the reading then it will be time to shock your pool. Shock the pool using sodium hypochloride or granular shock per manufacturer's instructions.
- 8.) SolarChlor is designed to save the end user energy and chemical costs. The chlorine levels are directly related to bather load, water balance, weather conditions, gallons treated, etc.. Supplementary use of chlorine may be needed depending on these factors.
- 9.) The SolarChlor unit should be used to help maintain a chlorine level, not to establish or create one. This factor depends on items mentioned above in No. 8. Utilize shock to establish initial chlorine level or utilize chlorine in tablet or granular form in a supplemental fashion.

### Regular Maintenance and Upkeep for the SolarChlor

- "Shocking" the pool on a regular basis eliminates the impurities that interfere with the performance of the chlorine being manufactured by the SolarChlor. Ensure that your salt level and water chemistry is correct. Regular liquid shock or sodium hypochloride can be used.
- 2.) Keep solar panel clean. Do not use muriatic acid (HCL) to clean solar panel. Please use a sponge or soft cloth and window cleaner to clean solar panel if water spots, dirt or debris are present. A dirty solar panel will decrease the performance of the SolarChlor unit. If anode is removed from anode drawer or unit is removed from the pool for a long period of time, please remove anode from drawer; dry off anode and store in a zip lock plastic bag to avoid oxidation. If oxidation occurs, please clean anode with 20-grit sandpaper prior to replacing into anode drawer.

#### Troubleshooting Tips

- 1.) Ensure that the filter and operating system is clean.
- 2.) If there is difficulty maintaining a chlorine level or pool turning green; double dose shock the pool with liquid chlorine shock at a rate of 2 gallons of liquid chlorine shock per 7,500 gallons of pool water. If the water remains green or emerald green in appearance, it would indicate the presence of minerals, which can be removed by adding 1 quart of metal inhibitor per 10,000 gallons of water; allow the pump filter system to run for 6-10 hours.
- 3.) Check water chemistry and adjust accordingly.
- 4.) Raise the salt level in the pool. This will promote a higher production of chlorine output.
- 5.) Raise the Cyanuric Acid level to 100 ppm.
- 6.) Ensure phosphates are below 300 PPB (parts per billion).
- 7.) Remove oils from pool using natural enzymes.
- 8.) Shock weekly during heavy use or extreme heat by using 1 gallon of liquid shock per 10,000 gallons of water.

#### Prevent Child Injury

- SolarChlor is NOT a supportive lifesaving floatation device.
- SolarChlor is NOT a toy and should not be played with as such. It is recommended that the SolarChlor unit be extracted from the pool if safety or misuse is a concern or issue.
- Do NOT allow children to operate the SolarChlor unit.
- Do NOT allow diving or jumping onto the SolarChlor unit as this may cause injury or drowning.
- Use Caution when tethering the SolarChlor device as not to cause entanglement with swimmers or bathers.

### Hazardous Chemical Use

- Always use precaution when dealing with chemicals. It is recommended that a well-ventilated area always be
  provided when dealing with chemicals and that eye protection and gloves be used. Always read the label and
  follow manufacturer's instructions for chemical use handling.
- Use caution when removing the SolarChlor unit from the pool and ensure that all water is drained into the pool prior to extraction.
- The SolarChlor unit produces and manufacturers chlorine. Appropriate precautions should be taken to avoid injury, illness or death. Always operate the SolarChlor device in a well-ventilated area. The SolarChlor unit is not to be used in any other method or application other than what is recommended in this instruction manual.

#### **Quick Start Procedures**

- There is "no" charging or recharging required prior to use.
- · Adjust salt level and water chemistry accordingly; reference table below.
- Double dose shock the pool water with sodium hypochloride or with available shock.
- Place anode in drawer and fill the drawer with salt. Replace drawer into cell housing assembly.
- There is no need to fill "blue boost bowl" assembly with salt in saltwater application unless boost is needed. Replace blue bowl assembly with gray cap for more efficient output if needed. (When handling the SolarChlor unit be advised to hold the unit from the bottom as well as the top.)
- Turn your SolarChlor unit to "high" output mode (red LED flashing) and place it in the water. We recommend tethering the SolarChlor unit in an appropriate location; not to hinder the skimmer.
- Turn off the SolarChlor unit when taken out of the pool or water and drain water from the unit back into the pool.
- For swimming pool use; the SolarChlor is designed to help maintain a chlorine level not establish one.
- Shock the pool weekly or as needed.
- The LED lights will flash only during daylight hours.

| Recommended Water Chemistry and Balance       |  |  |  |  |  |
|---|--|--|--|--|--|
| PH Levels                                     | 7.2 ppm – 7.4 ppm  |  |  |  |  |
| Alkalinity Level – Gunite                     | 80 ppm – 100 ppm   |  |  |  |  |
| Alkalinity Level – Vinyl/Fiberglass           | 120 ppm – 150 ppm  |  |  |  |  |
| Hardness Level                                | 200 ppm – 300 ppm  |  |  |  |  |
| Cyanuric Acid Level/Conditioner or Stabilizer |  |  |  |  |  |
|   | 80 ppm – 100 ppm   |  |  |  |  |
| Salt Level                                    | Acceptable - 4000 ppm – 6000 ppm                             |  |  |  |  |
|   | (Salt levels can be adjusted higher or lower to suite output |  |  |  |  |
|   | and gallons of pool)   |  |  |  |  |
| Phosphate Level                               | 200 ppm or lower   |  |  |  |  |
| Nitrate Level                                 | 0 – 3 ppm  |  |  |  |  |
| Free Chlorine Level                           | 0.5 ppm – 3 ppm  |  |  |  |  |
| Copper Level                                  | 1.3 ppm or lower   |  |  |  |  |
| Iron Level                                    | 0.0 ppm  |  |  |  |  |

\*For problems/questions please contact MEI at SolarChlor.com/contact

| Operation of the SolarChlor Unit               |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|
| **Place anode in anode drawer                  |  |  |  |  |  |  |  |  |
| Anode<br>Housing                               | Anode Output Adjustment:<br>Output of the mineral ions can be adjusted higher<br>or lower by simply grasping and turning the<br>anode outer housing assembly clockwise or<br>counterclockwise. High output would be with<br>portals fully open and lower output would be<br>achieved by decreasing portal size.  |  |  |  |  |  |  |  |
| Anode<br>Drawer                                | Fillable Anode Drawer:<br>Anode drawer can be removed and filled with<br>salt. The purpose of this is to produce more ions<br>to neutralize algae growth. The anode drawer<br>does not have to be filled or refilled to provide<br>algae inhibiting ions but the amount of ionic<br>action can be governed in this manner along with<br>the output adjustment. Rock salt works best and<br>lasts longer. Do NOT fill anode drawer with salt<br>past it's capacity and force closure. |  |  |  |  |  |  |  |
| Snap in<br>Refillable<br>Bowl and<br>Boost Cap | Fillable "BOOST" Cap Assembly:<br>Salt can be added to the cap or bowl assembly to<br>provide more chlorine if needed. It is not<br>necessary to fill or refill the cap assembly to<br>produce chlorine when used in saline pools. Salt<br>crystals or rock salt works best. For fresh water<br>applications, refill blue boost bowl as needed.<br>Ensure the salt used is NaCL and not potassium<br>based. Granular or system salt can also be<br>utilized.                         |  |  |  |  |  |  |  |
| Tethering<br>Capabilities                      | Tethering Capabilities:<br>Tethering the SolarChlor unit is easy and at the<br>pool owner's discretion. Careful thought should<br>be placed into safety and location. Consider the<br>sunny side of the pool for optimal output, close to<br>a return jet. If unit is not tethered, it could end up<br>in the skimmer and not work properly.   |  |  |  |  |  |  |  |
| High/Med/Low<br>Chlorine output<br>Button      | High/Medium/Low Chlorine Output:<br>Output selection function is a magnetic switch,<br>which is located in the "Sun" logo. The "Key" to<br>the magnetic switch is located in the backside of<br>the suction cup. Place the "Key" on the "Sun"<br>logo to change output settings.<br>Red Light LED = 100% High output setting<br>Red-Yellow LED = 75% Medium output setting<br>Yellow Light LED = 50% Low output setting<br>No LED flashing = The unit is off                         |  |  |  |  |  |  |  |

## Adding Salt to the Pool

Please review the salt chart and add the recommended amount of salt to the pool. Please sift in the salt around the perimeter of the pool slowly and brush frequently with the pump running as to dissolve the salt quickly. Do NOT add salt to the skimmer. Add salt in small doses, dissolve and then repeat process until desired salt level is achieved.

|         | How Much Salt to Add to Your Pool in pounds and (KG)                     |       |       |             |          |       |       |       |       |       |  |  |
|---------|--|-------|-------|-------------|----------|-------|-------|-------|-------|-------|--|--|
| Current | Swimming Pool Water in Gallons and (Liters) to achieve 4000 ppm          |       |       |             |          |       |       |       |       |       |  |  |
| Levels  | Salt level can be adjusted higher or lower to suite output 3800-6000 ppm |       |       |             |          |       |       |       |       |       |  |  |
| of Salt |  |       |       |             |          |       |       |       |       |       |  |  |
| n ppm   |  | 1     |       |             |          |       |       |       | -     |       |  |  |
| Gallo   | 1,00   | 5,000 | 7,500 | 10,00       | 12,00    | 14,00 | 16,00 | 18,0  | 20,00 | 22,00 |  |  |
| ns      | 0  | (1892 | (2838 | 0           | 0        | 0     | 0     | 00    | 0     | 0     |  |  |
| (Liter  | (378   | 5)    | 7)    | (3785       | (454     | (5299 | (6056 | (681  | (7570 | (8327 |  |  |
| s)      | 5)   |       |       | 0)          | 25)      | 6)    | 7)    | 37)   | 8)    | 9)    |  |  |
| 0       | 33   | 167   | 250   | 334         | 401      | 467   | 534   | 601   | 668   | 734   |  |  |
|         | (15)   | (75)  | (113) | (151)       | (182)    | (212) | (242) | (273) | (303) | (333) |  |  |
| 250     | 31   | 156   | 234   | 313         | 376      | 438   | 501   | 563   | 626   | 688   |  |  |
|         | (14)   | (70)  | (106) | (142)       | (170)    | (199) | (227) | (256) | (284) | (312) |  |  |
| 500     | 29   | 146   | 219   | 292         | 351      | 409   | 467   | 526   | 584   | 643   |  |  |
|         | (13)   | (66)  | (99)  | (132)       | (159)    | (185) | (212) | (238) | (265) | (291) |  |  |
| 750     | 27   | 135   | 203   | 271         | 325      | 380   | 434   | 488   | 542   | 597   |  |  |
|         | (12)   | (61)  | (92)  | (123)       | (148)    | (172) | (197) | (221) | (246) | (271) |  |  |
| 1000    | 25   | 125   | 187   | 250         | 300      | 351   | 401   | 451   | 501   | 551   |  |  |
|         | (11)   | (56)  | (85)  | (113)       | (136)    | (159) | (182) | (204) | (227) | (250) |  |  |
| 1250    | 22   | 114   | 172   | 229         | 275      | 321   | 367   | 413   | 459   | 505   |  |  |
|         | (10)   | (51)  | (78)  | (104)       | (125)    | (146) | (167) | (187) | (208) | (229) |  |  |
| 1500    | 20   | 104   | 156   | 208         | 250      | 292   | 334   | 376   | 417   | 459   |  |  |
|         | (9)  | (47)  | (71)  | (94)        | (114)    | (132) | (151) | (170) | (189) | (208) |  |  |
| 1750    | 18   | 94    | 141   | 188         | 225      | 263   | 300   | 338   | 376   | 413   |  |  |
|         | (8)  | (42)  | (64)  | (85)        | (102)    | (119) | (136) | (153) | (170) | (187) |  |  |
| 2000    | 16   | 83    | 125   | 167         | 200      | 234   | 267   | 300   | 334   | 367   |  |  |
|         | (7)  | (37)  | (56)  | (75)        | (91)     | (106) | (121) | (136) | (151) | (167) |  |  |
| 2250    | 14   | 73    | 109   | 146         | 175      | 204   | 234   | 263   | 292   | 321   |  |  |
|         | (6)  | (33)  | (49)  | (66)        | (79)     | (93)  | (106) | (119) | (132) | (146) |  |  |
| 2500    | 12   | 62    | 93    | 125         | 150      | 175   | 200   | 225   | 250   | 275   |  |  |
|         | (5)  | (28)  | (42)  | (56)        | (68)     | (79)  | (91)  | (102) | (114) | (125) |  |  |
| 2750    | 10   | 52    | 78    | 104         | 125      | 146   | 167   | 188   | 209   | 229   |  |  |
|         | (4)  | (23)  | (35)  | (47)        | (57)     | (66)  | (76)  | (85)  | (95)  | (104) |  |  |
| 3000    | 8  | 41    | 62    | 83          | 100      | 117   | 134   | 150   | 167   | 184   |  |  |
|         | (3)  | (18)  | (28)  | (37)        | (45)     | (53)  | (61)  | (68)  | (76)  | (83)  |  |  |
| 3250    | 6  | 31    | 46    | 62          | 75       | 88    | 100   | 113   | 125   | 138   |  |  |
|         | (2)  | (14)  | (21)  | (28)        | (34)     | (40)  | (45)  | (51)  | (57)  | (62)  |  |  |
| 3500    | 4  | 20    | 31    | 41          | 50       | 58    | 67    | 75    | 83    | 92    |  |  |
|         | (1)  | (9)   | (14)  | (18), pyrig | ht (203) | (26)  | (30)  | (34)  | (38)  | (42)  |  |  |
| 3750    | 2  | 10    | 15    | 21          | 25       | 29    | 33    | 38    | 42    | 46    |  |  |
|         | (.9)   | (4)   | (7)   | (9)         | (11)     | (13)  | (15)  | (17)  | (19)  | (21)  |  |  |
| 4000    |  |       |       |             |          |       |       |       |       |       |  |  |

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