U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Antimicrobials Division (7510P) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460	EPA Reg. Number: 90859-2	Date of Issuance: 9/29/2020	
NOTICE OF PESTICIDE: <u>X</u> Registration <u>Reregistration</u> (under FIFRA, as amended)	Term of Issuance: Conditional		
	Name of Pesticide Product: ClearBlue Ionizer		
Name and Address of Registrant (include ZIP Code): Stephanie Evans Consultant for ClearBlue Ionizer Inc. 6620 Cypresswood Drive, Suite 250 Spring, TX 77379			
<b>Note:</b> Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Antimicrobials Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.			
On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.			
Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.			
This product is conditionally registered in accordance with FIFRA section $3(c)(7)(A)$ . You must comply with the following conditions:			
1. Submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.			
Signature of Approving Official:	Date:		
Eric Miederhoff Product Manager 31 Regulatory Management Branch I Antimicrobials Division (7510P) Office of Pesticide Programs EPA Form 8570-6	9/29/20	020	

Registration Notice Conditional v.20150320

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- 2. You are required to comply with the data requirements described in the DCI identified below:
  - a. Copper GDCI-022501-1258
  - b. Silver GDCI-072501-1129

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Reevaluation Team Leader (Team 36): <u>http://www2.epa.gov/pesticide-contacts/contacts-office-pesticide-programs-antimicrobial-division</u>

- 3. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 90859-2."
- 4. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Assurance.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

• Basic CSF dated 06/24/2020

If you have any questions, please contact Tara Flint via email at <u>flint.tara@epa.gov</u> or Eric Miederhoff at Miederhoff.eric@epa.gov.

Enclosure

**EPA MASTER LABEL** 



ClearBlue

[Alternate Name Brands:

JENi Mineral Generator ClearStream Ionizer Clear Copper/Silver Ionization System Zing Mineral Water System Silver Water System]

#### Active Ingredients:

Copper (as elemental)	
Silver	5.00%
Other Ingredients	9.96%
Total Ingredients	

# KEEP OUT OF REACH OF CHILDREN

NOTICE TO USER: This control product is to be used only as directed on this label. Read entire label along with installation and operation manual before use.

EPA REG. No. 90859-R EPA EST. No. 90859-CAN-XX

Manufactured by ClearBlue Ionizer Inc. 3045 Southcreek Rd. Unit 45 Mississauga ON L4X 2E9 Tel. (866) 704.8404 <u>support@clearblueionizer.com</u> <u>www.clearblueionizer.com</u>

#### ENVIRONMENTAL HAZARDS

This product is toxic to aquatic organisms.

#### STORAGE AND DISPOSAL

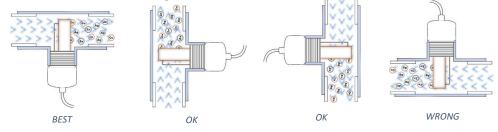
Store in closed, original container in a cool dry place. Do not store in direct sunlight. Dispose of packaging in household garbage or recycling stream.

#### DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with it's labeling. This product will assist in controlling bacteria and algae in pools and spas by augmenting the bactericidal and algicidal activity of primary disinfectants such as chlorine or bromine. See owner's manual inside box for full installation procedures, maintenance instructions and detailed directions for use. Ensure hardness, pH, alkalinity and TDS are within acceptable levels. Excessive amounts of algae or bacteria must be controlled prior to installation. Run the pump a minimum of 8 hours per day. A residual of 0.5ppm chlorine or bromine (equivalent to one 3" tablet every week or two) should be maintained to break down organics. Once the copper concentration has reached the required level of 0.2 - 0.4 ppm, maintain 0.5 - 3 ppm of free available chlorine in pools and 0.5 - 5 ppm of free available chlorine in spas. Shock may be required in cases of extreme weather conditions or increased bather loads resulting in high contaminants. Regulated pools must follow provincial, state or municipal guidelines. Before draining a treated pool, spa, hot tub, or fountain, contact your local sanitary sewer and storm drain authorities and follow their discharge instructions. Do not discharge treated pool or spa water to any location that flows to a gutter, storm drain or natural water body unless discharge is allowed by state and local authorities.

# ATTENTION

- 1) For your ClearBlue Ionizer to work properly, these steps must be taken *before* installation:
  - i. Ensure **hardness**, **pH**, **alkalinity and TDS** are within acceptable levels (see *Maintenance* section in operating manual for details).
  - ii. Excessive amounts of algae or bacteria must be controlled prior to installation.
- 2) Run the pump a minimum of 8 hours per day.
- A residual of **0.5ppm** chlorine or bromine (equivalent to one 3" tablet every week or two) should be maintained to break down organics.
- Keep your ion level between 0.2ppm 0.4ppm. Test your water with the Copper Test Kit periodically to ensure ion level is within this range. Do not reduce the amount of sanitizer used until the ion level reaches 0.2ppm.
- 5) Shock may be required in cases of extreme weather conditions or increased bather loads resulting in high contaminants.
- 6) Do not plug the controller into a timer.
- Install the tee so the two bars of the cell point up or are parallel with the ground



#### © ClearBlue Ionizer Inc.

# **INSTALLATION & OPERATION MANUAL**

# PLEASE CAREFULLY READ AND SAVE THESE INSTRUCTIONS

Thank you for purchasing a ClearBlue Ionizer. This device will assist in controlling bacteria and algae in pools and spas by augmenting the bactericidal and algicidal activity of primary disinfectants such as chlorine or bromine. Once the copper concentration has reached the required level of 0.2 – 0.4ppm, maintain 0.5 – 3ppm of free available chlorine in pools and 0.5 – 5ppm of free available chlorine in spas. Regulated pools must follow provincial, state or municipal guidelines.

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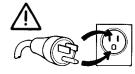
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# Important Safety Instructions

When installing and using this electrical equipment, basic safety precautions should always be followed. Please read all instructions before using this system.

- Do not reduce chemical usage in pools until the ion level reaches 0.2 0.4 parts per million (ppm)
- Protect controller from direct elements (rain, sun). A weatherproof outdoor enclosure is recommended.
- To prevent corrosion and extend the longevity of your controller, add lithium grease to the inside of the pink connector before the mineral cell is plugged in.
- To reduce the risk of injury, do not permit children to operate this device.
- Follow all aspects of the local and national electrical code(s) when installing this device.
- Install or locate this equipment only in accordance with the provided installation instructions.
- This unit is only water resistant when the mineral cell cable is plugged into the pink connector. Failure to do this may result in internal water damage.
- Use this equipment only for its intended use as described in this manual.
- This system should be serviced only by the manufacturer. Contact the manufacturer for examination, repair or adjustment.
- Do not operate this system if it has a damaged cord or plug.
- Do not immerse cord or plug in water.
- Keep cord away from heated surfaces.
- Heavy bather loads may trigger the need for additional chlorine/bromine.
- Check the expiry date of the test kit as test results may be inaccurate if used after that date.
- Use a registered or scheduled pool or spa sanitizer to maintain an appropriate chlorine/bromine residual in the water.
- The expected life expectancy of the mineral cell is one year (2160 "on" hours) under normal use conditions.
- Orient the mineral cell such that the water flows between the two electrode bars, or as closely as possible without leaking.
- When replacing the mineral cell, only use replacement cells having a label that clearly states that it is a replacement mineral cell for the mineral ion releasing device ClearBlue Ionizer,
- Refer to the Directions for use of your chlorine/bromine sanitizer for appropriate water parameters.

#### **Grounding Instructions**



Caution: This system must be grounded while in use to protect the operator from electric shock. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This system is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that

is properly installed and grounded in accordance with all local codes and ordinances.

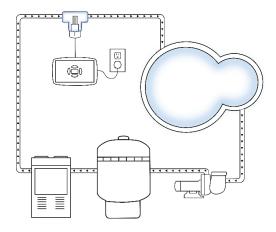
#### **Electrical Requirements**

The electrical requirements are a 120 or 240 volt 60 Hz, AC only, 15+ AMP protected electrical supply. Please check the label on the back of the controller for voltage requirement. The retailer and manufacturer cannot accept any liability for damage to the equipment or personal injury resulting from failure to observe the correct electrical connection procedures.

#### Installation Instructions

The ClearBlue Ionizer can be installed in under 30 minutes. The ion chamber (PVC tee) is usually installed in the pool circulation system after the pump, filter and heater. It is recommended that you install the tee as close to the pool as possible. If that location does not work for some reason you may install anywhere between the pump, filter or heater. Please follow these instructions:

- Ensure the total alkalinity is between 100 and 120 ppm. Also ensure hardness, pH and TDS are within acceptable levels (see maintenance section) Excessive amounts of algae should be controlled prior to startup.
- 2. Turn off the pump.
- 3. Plan the placement of the tee and controller so that there is adequate cable length for the cell to reach the controller and the controller to reach the power source. A qualified electrician can extend the mineral cell cable if required using standard 18/3 cable.
- 4. Drain the water pipe in which you have chosen to install the tee.
- 5. Cut out a 2.5" section of the run of pipe where you have chosen to install the tee.
- Replace this part of the pipe with the tee assembly and fasten with standard PVC primer and glue making sure that the direction of water flow goes between the two electrodes and the tee is always full of water.



- 7. Mount the controller with the screws provided on a suitable surface.
- 8. Connect cable from mineral cell into the controller.
- 9. Use your hand to turn the cell clockwise into the tee until it is secure. Turn until they sit parallel to the water so water flows between the two metal prongs evenly (or as closely as possible without leaking).
- 10. Plug into suitable ground fault protected outlet.
- 11. Do not reduce your chlorine or bromine concentration until the ion level reaches 0.2 ppm.

# The Digital Display



- Ionizing/ Mineral Action When the "Ionizing" or "Mineral Action" light is illuminating, it confirms that everything is hooked up correctly and the system is releasing minerals into the water. The "Ionizing" light will flash when the mode is set to Large Dose or Increase.
- Ion/Action/Maintain This setting represents the percentage of maximum dose. The suggested setting follows in the operating instructions.
- Large Dose/Increase Press this button to release the maximum amount of ions for the number of hours you choose. The default setting is 24 hours. The display will count down the number of hours left. The system will return to the previously set Ion/Action/Maintain setting when the increase mode ends. Use this function at your discretion whenever a burst of minerals is required. You may choose to use this when the ionizer is first installed, upon re-filling, or during large amounts of rain or spillage.
- "-" This button will *decrease* the setting for the selected function.
- "+" This button will *increase* the setting for the selected function.
- Program LockThis feature will lock the controller at the currently programmed settings. To lock the<br/>program, hold down the "-" button and the "+" button simultaneously for 20 seconds,<br/>you will see "PL" (program lock) appear on the screen. To unlock, use the same<br/>process.

#### **Operating Instructions**

- **1. Power Up** Plug in the controller. The digital display will turn on.
- **2. Program** Press the "Ion/Action" or "Maintain" button to set the ion cycle time. Follow the guidelines below based on the gallons or liters you are ionizing.
- 3. Optional Press the "Large Dose" or "Increase" button to set the hours of large dose. You may set from 1 to 99 hours. 24 hours will activate as the default setting. Follow the guidelines below. When the large dose / increase cycle is finished it will return to the previously set Ion/Action or Maintain setting.

Liters	Gallons	Ion/Action/Maintain (% of Maximum dose)	Large Dose/Increase (hours)
750	200	8	8
1,500	400	14	16
1,900	500	18	20
3,800	1,000	35	37
5,700	1,500	53	55
7,550	2,000	72	75
9,500	2,500	90	95

## Model A-400 (Maximum 2,500 gal / 9,500 L)

# Model A-700 (Maximum 18,000 gal / 68,100 L)

Liters	Gallons	Ion/Action/Maintain (% of Maximum dose)	Large Dose/Increase (hours)
18,900	5,000	25	26
37,850	10,000	50	53
56,800	12,000	60	63
75,700	15,000	75	79
94,650	18,000	90	95

### Model A-800 (Maximum 25,000 gal / 94,650 L)

Liters	Gallons	Ion/Action/Maintain (% of Maximum dose)	Large Dose/Increase (hours)
18,900	5,000	18	19
37,850	10,000	32	40
56,800	15,000	55	58
75,700	20,000	72	75
94,650	25,000	90	95

# Model A-850 (Maximum 40,000 gal / 151,400 L)

Liters	Gallons	Ion/Action/Maintain (% of Maximum dose)	Large Dose/Increase (hours)
37,850	10,000	20	24
75,700	20,000	45	48
113,560	30,000	70	72
151,400	40,000	95	96

Please note these are only general guidelines. You will need to adjust the levels based on your copper test kit readings. See the maintenance section for more information.

Based on the ion output, it will take approximately 7 days to attain the minimum copper residual of 0.2ppm and 14 days to attain the copper residual of 0.4ppm in the maximum pool volume stated on the label.

#### Maintenance

- 1. **Copper Ion Test:** Using the included copper test kit, ensure ions are between 0.2 0.4 ppm; spa applications can increase ion level up to 0.6ppm. Test the ion level once a week until you have found the proper Ion/Action or Maintain setting for your pool or spa. Increase or decrease the Ion/Action or Maintain setting as required. Carefully read and follow the instructions for your copper test kit. Check the expiry date of the copper test kit as test results may be inaccurate if used after that date.
- 2. **Mineral Cell:** The mineral cell that delivers minerals to the water needs to be checked once per season and typically lasts for one year (2,160 "on" hours) under normal use conditions. You can purchase additional cells from your authorized dealer. To replace the cell, simply turn the old cell counter-clockwise to release it from the tee. Use your hand to turn the new cell clockwise into the tee until it is secure. If possible, turn until the electrode bars sit parallel to the water flow (so water flows between them).
- 3. Occasionally, you will need to oxidize the water to help break down excess organic matter (i.e. sweat, urine, makeup, suntan oils). In pools, we suggest running your ionizer system in conjunction with 0.5 ppm chlorine or bromine. Chlorine tablets are recommended before liquid shock as they are extremely stable and slow releasing. Or, you may prefer a non-chlorine oxidizer such as Spaboss Energize (or equivalent brand) which is pH neutral.
- 4. Keep the total alkalinity between 80 and 120 ppm.
- 5. Keep pH between 7.2 -7.6. Unlike chlorine, ions are pH neutral so they will not change the pH level of the water. But your choice of oxidizer or environmental factors may.
- 6. Keep calcium hardness between 200 and 300 ppm.
- 7. Keep total dissolved solids (TDS) between 500 and 2,000 ppm.
- 8. Ensure phosphates are at 100ppb or less by testing phosphates on an algae free pool (chlorine must be below 5ppm). If phosphates are above 100ppb use PHOS*free* or similar product to remove the bulk of the phosphates. Once the phosphates are below 100ppb, maintain with Pool Perfect+PHOS*free* or similar. If phosphate levels continue to rise, the following may be the cause: fertilizers, organics, metal sequestering products, scale products, or extreme rainfall. The above will cause phosphates to continue to rise above what Pool Perfect+PHOS*free* can maintain. It is important to reduce/eliminate the source of the phosphates for Pool Perfect+PHOS*free* to work properly. If possible, prevent runoff from gardens and lawns from entering the pool. Remove leaves from the pool regularly and promptly.
- 9. You may need to add a **clarifier or flocculent** if you see cloudy water or fine particles in the water which the filter cannot catch. With the pump turned off, the clarifier clumps fine particles together and causes them sink to the bottom. When the particles have settled on the bottom of the pool they are easily removed by vacuuming. This is not a dangerous chemical and it is used in small quantities. Please follow the directions on the product label.
- 10. **Closing the pool.** Close your pool according to the instructions from your pool store or pool builder. If you use a closing kit, it may include a 'stain and scale' or other type of sequestering product. The purpose of this is to remove contaminants from the water that might cause staining to your pool surfaces. Sequestering products will also remove the ClearBlue minerals from the water so you will need to ramp them up again in the Spring. If you use a clean water source and are confident that there is no iron, manganese, or other contaminants in the water that might cause staining, you can skip the 'stain and scale' step of closing. There are two benefits to this. First, the minerals will keep fighting algae over the winter so your water will be cleaner in the spring. Second, it will not take as long to build up the copper to the recommended 0.2ppm to 0.4ppm so you will save the life of your mineral cell.

#### Note: 'Stain and Scale' or other sequestering products conflict with ClearBlue.

If you use a stain and scale or other sequestering product, it will remove the ClearBlue minerals from the water and neutralize new minerals for several weeks. Before adding a sequestering product, turn off the ClearBlue controller by unplugging it from the power source, or turning down the 'Ion/Action' or 'Maintain' setting to 00 to preserve the life of the electrodes. After three to five weeks, you can turn the controller back on. You will need to ramp up the copper level to 0.2ppm to 0.4ppm again using the method described above.

If you have a serious staining and scaling problem, it can also be treated at the point where the water enters the pool or spa using a metal trap filter. This filter can be attached to the garden hose and will provide better water quality for your pool or spa.

#### **Cleaning & Care**

**Mineral Cell Electrodes:** Some deposits may form on the electrodes depending on the water conditions. Clean the flat face of the electrodes using a smooth metal file and some water. The surface does not have to be polished; simply remove any traces of oxidization and other sediments. Remove the old Teflon tape, use new tape and wrap it around six to twelve times, or until the threads are completely covered.

**System Controller Exterior Housing:** The housing of the controller is made from a durable PVC plastic. Clean the outside with a mild soap and water; rinse and dry with a soft cloth. Do not use any type of household or abrasive cleaner.

**System Controller Panel:** Care should be taken in cleaning the controller panel. If the panel becomes soiled, wipe it with a cloth dampened slightly with water only. Dry with a soft cloth. Do not scrub or use any sort of chemical cleaners.

#### Warranty

The ClearBlue Ionizer carries a three (3) year limited warranty to be free from all manufacturing defects. This warranty does not include replacement mineral cells, which are subject to normal wear and must be replaced periodically. You must obtain a Return Materials Authorization (RMA) number from Customer Service before returning a product. The device will be repaired or replaced within fifteen business days following a claim. This warranty is in effect starting the date of purchase and is only applicable to units with an unopened enclosure and a serial number that is in its original unaltered state. This warranty does not apply to the following incorrect operating procedures, breakage, or (transport/impact) damages caused by fault, abuse, misuse, carelessness, misapplication, alteration, modification, improper maintenance, over voltage of the unit as well as act of God, fire, chemical alteration or natural corrosion or any other casualty. This warranty does not apply to the components manufactured by ClearBlue Ionizer Inc.

# **Specifications**

Input Voltage: 100 - 240 Volts AC Input Frequency: 50 to 60 Hertz Output Voltage: 38 VDC Max Output Current: 0.20 AMP Max Outside Dimensions: 5" x 3" x 2.5" Controller: 0-99 variable settings Tee: Slip x Slip x 1 ½" FIP S40 PVC Tee Mineral Cell Size: 3" x ½" x 5/16" Each x (2) Bars Mineral Cell Weight: 8 ounces Typical Mineral Cell Life: 2,160 "on" hours Capacity: Max 2,500, 18,000, 25,000 or 40,000 Gallons

Need help?

REGISTRATION NO. 29954 PEST CONTROL PRODUCTS ACT (PMRA) EPA Reg. No. 90859-R EPA EST. No. 90859-CAN-XX

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