

# **Accu-Tab<sup>®</sup> Systems** **2000 GS Series** **by Axiall Corporation**

## **Installation and Operating Instructions**

**Models 2075 GS**  
**2150 GS**  
**2300 GS**  
**2600 GS**

**DANGER:**

**DO NOT MIX CHEMICALS!**

The Accu-Tab<sup>®</sup> chlorinator is designed for use with Axiall approved tablets only. Do not use Cal-Hypo tablets with stabilized chlorine or bromine products, or other sanitizing chemicals.

Fire or explosion could result.

## System Description

The Accu-Tab<sup>®</sup> tablet chlorinator system incorporates a patented Axiall chlorinator, which is designed to utilize Axiall's Accu-Tab<sup>®</sup> SI calcium hypochlorite tablets. The chlorinator is mounted on an aluminum frame. Included in the system is an integrated, level controlled solution tank. Using a manually adjusted valve and flow meter the amount of water through the chlorinator is controlled. This results in a constant and predictable rate of chlorine delivery. The feeder is designed for use ONLY with Axiall Accu-Tab<sup>®</sup> SI tablets to utilize the Axiall erosion feeder technology that erodes only the bottom layer of tablets on the sieve plate, while keeping tablets above the sieve plate dry and ready for use. Tablets other than Axiall Accu-Tab<sup>®</sup> SI tablets will have different delivery rates, resulting in improper chlorine delivery.

## How to calculate chlorine delivery needed

Information required:

System flow rate in USgpm (gpm)  
Chlorine demand of water to be treated (Demand ppm)  
Chlorine residual desired (Residual ppm)

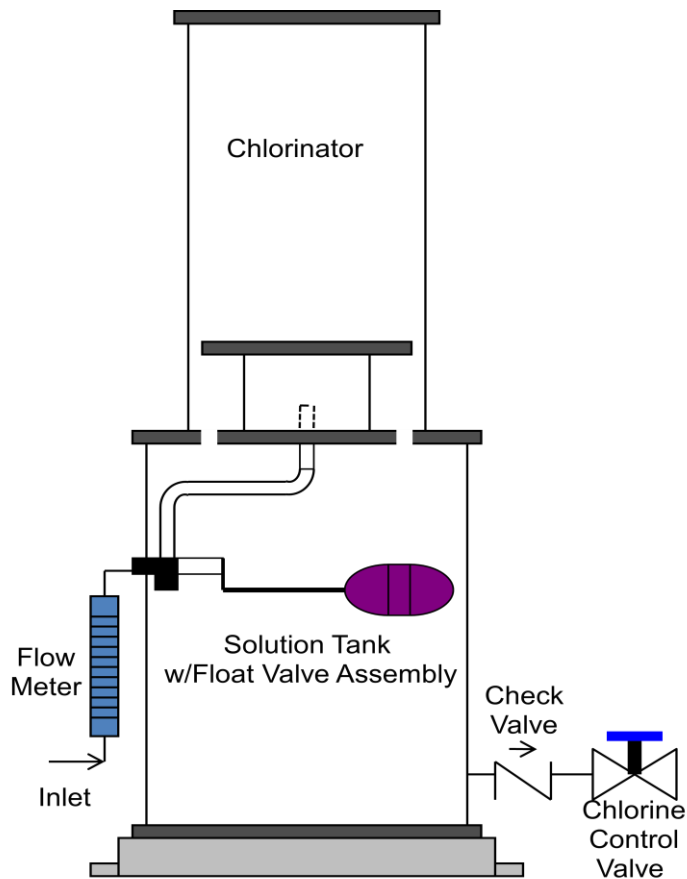
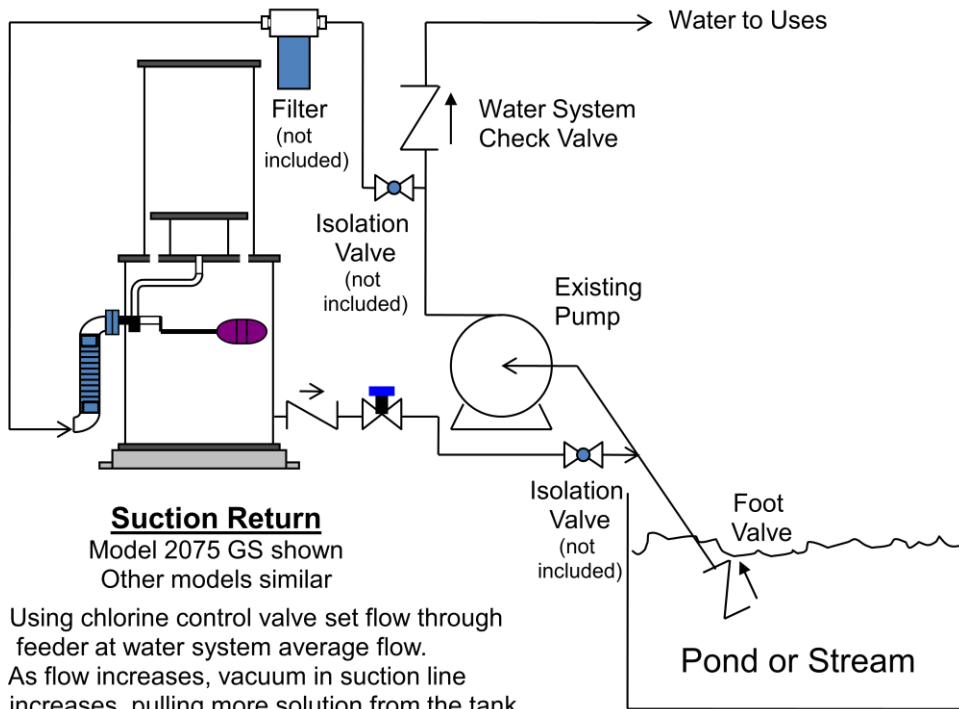
Formula is:  $\text{gpm} \times (\text{Demand ppm} + \text{Residual ppm}) \times 0.0005 = \text{lbs. Cl}_2/\text{hr}$

From charts on pages 5 & 6, determine initial flow setting for chlorinator.

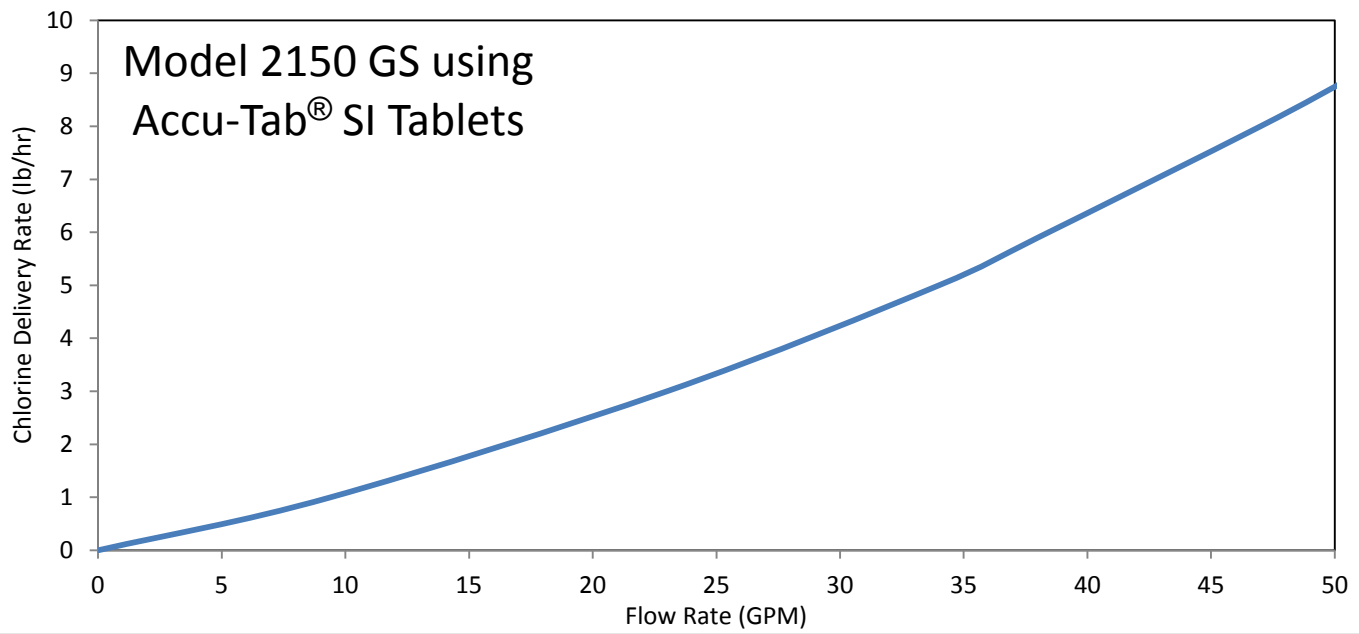
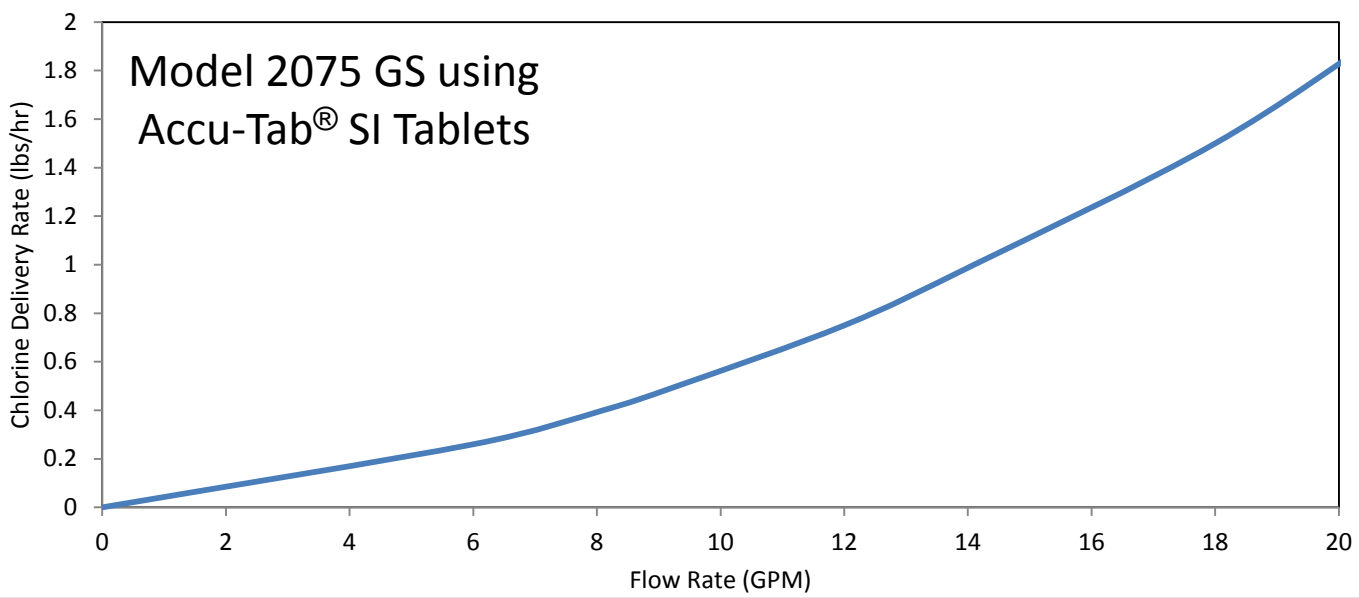
Take chlorine residual readings and adjust flow to chlorinator until desired residual is reached.

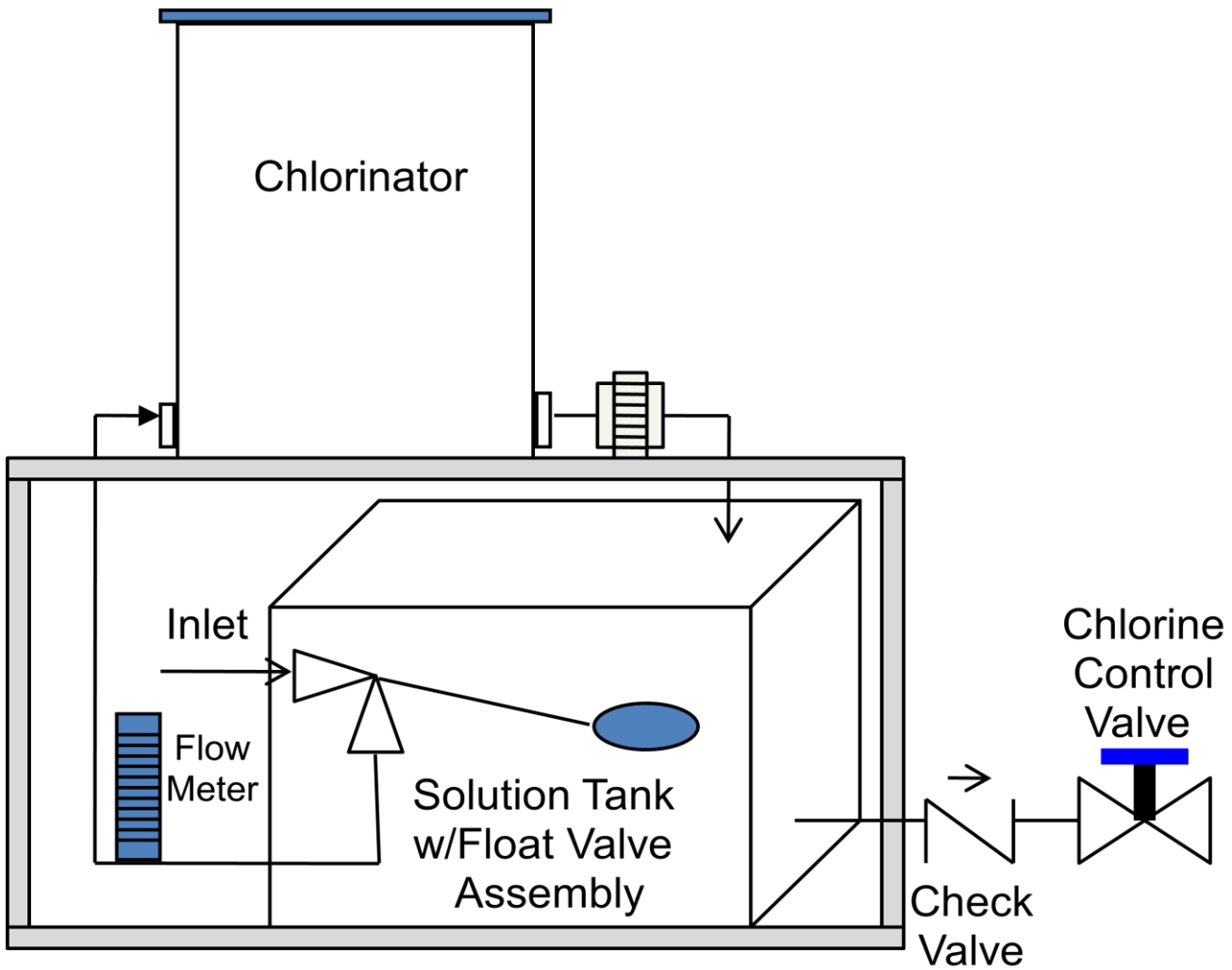
## Installation and Start-Up Instructions

- A. Uncrate, remove from pallet, and check for damage that may have occurred during shipping. If damage occurred during shipment, file a claim with the shipping company.
- B. Place the chlorination system in a location near the place of application.
- C. Level the system with the supplied leveling bolts. This is important for proper chlorine delivery.
- D. Install a pressure regulator on the inlet supply line IF inlet line pressure is greater than 60 psi. Tank flooding will result if pressure exceeds **70 psi**.
- E. If supply pressure DOES NOT bleed down below **70 psi** when water system is shut down, a solenoid valve will need to be installed on the inlet line to prevent chlorination system flooding. The solenoid valve must be interlocked with your water system pump. Solenoid valve is **not** supplied with the GS system.
- F. For Models 2075 GS and 2150 GS, connect the inlet flow meter assembly to the solution tank (the parts were shipped loose to prevent breakage in shipping). Models 2300 GS and 2600 GS have the flow meter factory installed.
- G. Connect the inlet water supply with 1-1/2" PVC pipe or hose. Include an isolation valve at the main header line. If source water contains debris, include a filter in the line.
- H. Connect the chlorine control and check valve assembly to the bottom of the solution tank. Close the chlorine control valve completely. (The parts were shipped loose to prevent breakage in shipment.)
- I. Connect the discharge piping from the chlorine control valve to the chlorine application point with PVC pipe or hose. Include an isolation valve at the main header line.  
Model 2075 GS and 2150 GS use 1-1/2".  
Model 2300 GS uses 2".  
Model 2600 GS uses 3".
- J. Once the water input and output connections are in place, open isolation valves and check for leaks. Water will begin to flow into the chlorinator and fill the solution tank.
- K. Wait until water stops flowing into the solution tank. Open the chlorine control valve about 2-3 full turns to allow flow out of the system.
- L. Slowly, and in small, ¼ turn increments, continue to open the chlorine control valve to maintain the desired inlet flow.
- M. The chlorine delivery is determined by the flow rate through the chlorinator (see graphs).  
NOTE: After adjusting the chlorine control valve, the flow meter will take a few moments to stabilize.
- N. Turn the irrigation system OFF and ON several times, allowing it to operate for several minutes each time. Check all connections for leaks.
- O. To begin chlorinating, remove the chlorinator lid and fill the Chlorinator with Axiall *Accu-Tab*® SI tablets.
- P. NOTE: Add only the amount of tablets that will be consumed in 5-7 days. Tablets in the chlorinator longer than 5-7 days will pick up moisture and bridging may occur.

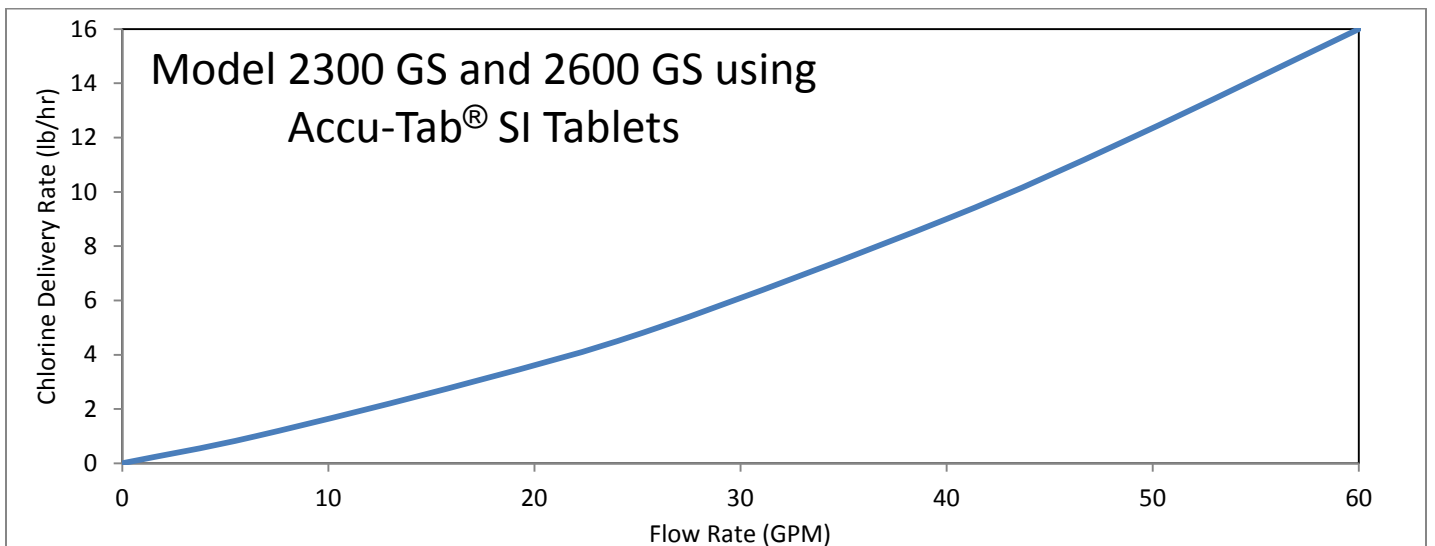


Models 2075 GS and 2150 GS Schematic





Models 2300 GS and 2600 GS Schematic



## Operating and Maintenance Instructions

- A. Clean the Check Valve at least every 4-6 months, to remove debris or scale.
- B. Disassemble Float Valve and clean every 6 months
- C. Cleaning the chlorination system  
Over time, and depending on the water chemical characteristics, some calcium scale may build up in the system. Following procedure to clean:
  1. Prepare 2 gallons of weak acid (~5%) solution.
  2. Open doors and windows for ventilation.
  3. Reduce the tablet volume in the chlorinator by operating the system to deplete the tablets.
  4. Physically remove any remaining tablets or pieces of tablets. Store in a safe manner (empty, clean Accu-Tab® SI tablet pail).
  5. Operate the system for 30 minutes to flush out all remaining chlorine solution, and hose down inside of chlorinator walls.
  6. Shut down the system, and close isolation valve on line feeding the system
  7. Drain tank level down to about  $\frac{3}{4}$  tank if necessary to prevent system from overflowing while adding cleaning acid
  8. Close the discharge isolation valve.
  9. Very slowly and carefully pour the weak acid solution into chlorinator.  
**CAUTION: AS ACID DISSOLVES SCALE, CARBON DIOXIDE WILL BE RELEASED, AND FOAMING WILL OCCUR. IF ANY CHLORINE WAS LEFT IN THE TANK OR CHLORINATOR, CHLORINE GAS MAY ALSO BE RELEASED.**
  10. Allow to stand for 10-15 minutes.
  11. Open isolation valves on the inlet and discharge to the system.
  12. Be prepared to handle some acid being discharged to your water system.
  13. Operate the chlorination system for 30 minutes to flush acid, and thoroughly wash out chlorinator with a hose.
  14. Shut system down.
  15. Inspect for any debris in the chlorinator or tank, and remove if found.
  16. Add tablets and restart system to resume chlorination.

## Winterizing

- A. Clean chlorination system following instructions above.
- B. Close inlet isolation valve and drain out tank.
- C. Siphon any remaining water from the solution tank.
- D. Remove any debris from the chlorinator or solution tank.
- E. Drain water from feed and discharge lines.
- F. Make sure no water remains in the chlorinator, pipe line, or solution tank to prevent freezing over the winter.

## Operating Troubleshooting Guide

- A. Solution Tank level runs low  
This can lead to inconsistent chlorine residuals. And in suction return systems, this can allow air to be pulled into the system pump. Follow the procedure to adjust:
  1. Slowly, and using small increments, close the chlorine control valve.

## Operating Troubleshooting Guide, con't

### B. Solution Tank overflows

1. Float valve is not shutting off flow to the system.
2. Float valve has failed. Check for debris.
3. Inlet pressure is greater than 70 psi. Add pressure regulator and/or solenoid valve on inlet line.

C. Contact Axiall Technical Service (855-934-3570) for assistance.

D. Float Valve was installed in a lower flow position. Float valve may be adjusted for higher flow. Call PPG for instructions.

### CAL-HYPO SYSTEM LIMITED WARRANTY

#### Limited System Warranty

Axiall Corporation ("Axiall ") warrants (subject to the below conditions) only its title to this water treatment system equipment (the "System") and that the System will be free of defects in materials and workmanship for a period of twelve (12) months from its original installation date. **THIS IS THE ONLY REPRESENTATION OR EXPRESS WARRANTY THAT AXIALL MAKES AND ALL OTHER EXPRESS WARRANTIES UNDER STATUTE OR ARISING OTHERWISE IN LAW FROM A COURSE OF DEALING OR USAGE OF TRADE WITH RESPECT TO THE SYSTEM ARE DISCLAIMED. ANY IMPLIED WARRANTIES EXISTING AS A MATTER OF LAW SHALL NOT EXCEED THE DURATION OF THIS LIMITED WARRANTY. IN THE EVENT THE SYSTEM FAILS TO CONFORM TO THIS WARRANTY, AXIALL'S EXCLUSIVE OBLIGATION AND YOUR EXCLUSIVE REMEDY SHALL BE LIMITED TO, AT AXIALL'S OPTION, THE FURNISHING OF NEEDED REPLACEMENT PARTS OR THE FURNISHING OF A NEW SYSTEM (BUT THIS DOES NOT INCLUDE INSTALLATION OR THE COSTS FOR INSTALLATION). EXCEPT AS PROVIDED IN THE IMMEDIATELY PRECEDING SENTENCE, IN NO EVENT WILL AXIALL BE LIABLE UNDER ANY THEORY OF RECOVERY (WHETHER BASED ON NEGLIGENCE OF ANY KIND, STRICT LIABILITY OR TORT) FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO ANY USE MADE OF THE SYSTEM.**

**Warranty Conditions.** This Limited Warranty shall apply and be effective only if: (i) The Axiall Chlorinator Warranty Registration information has been completed within thirty (30) days of the customers receipt of the chlorination system via the Internet at [www.accu-tab.com](http://www.accu-tab.com) under "Equipment Warranty"; (ii) the chlorination system is installed and operated and maintained in accordance with this manual and the instructions accompanying the chlorinator system; (iii) only Axiall's Accu-Tab<sup>®</sup> calcium hypochlorite tablets are used in the chlorinator. If any of these conditions are not met, this Limited Warranty will not apply and you acknowledge and agree that your purchase of the System will be on an "AS-IS" basis without any warranty of any kind whatsoever having been provided by Axiall.

You assume all responsibility and risk and liability arising from: (i) the unloading, installation, storage, handling and use of the System, including use thereof alone or in combination with other materials; (ii) the improper functioning or failure of unloading, installation, transportation or storage equipment you use, whether furnished or recommended by Axiall or not; and, (iii) the failure to comply with laws, rules and regulations governing storage, unloading, installation, handling, and use of the System. You will indemnify, hold harmless, and defend Axiall from and against any claim, suit, damage, cost, expense, fine, liability, or cause of action whatsoever, including reasonable attorney fees, on account of relating to, or arising out of the use, possession, installation or resale of the System.

This Limited Warranty gives you specific rights, and you also may have other rights, which vary from jurisdiction to jurisdiction. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.