



Quality Pool & Spa Products

## CHEMIGEM CHLORTROL A1



Code

Description

**1 Year Warranty**

00130003

Chlortrol A1 - Acid only feeder with one valve

RAINBOW POOL PRODUCTS PTY LTD

## THE TRUSTED NAME IN POOL MANAGEMENT

Pool water must be sanitised to remain safe. Chlorine is used for this purpose, but for it to be effective the pH and other factors must be optimally set. For decades these chemicals have been dosed by hand (and some pool owners still do) with the result being unmatched chlorine and pH levels. This hit and miss method resulted in the use of far more chlorine and acid than was necessary and offered variable sanitation quality for the pool. Then Chemigem was invented – a device which measured the pH and a new concept called ORP – or Oxidation Reduction Potential. The Chemigem controller measures these water quality parameters and makes a decision about whether to add chemical or not – and it makes these decisions about 30 times each hour. Gone is the hit-and-miss of hand dosing, gone is the variability of water sanitation – the era of automated water quality control has arrived.

## TAKE THE GUESS WORK OUT OF ADDING CHEMICALS

The Chemigem measures pH and ORP to keep your pool water healthy. pH is a measure of the acidity of the pool water, while ORP is a measure of the effectiveness of the chlorine in the water. Even though two pools may have the same measured chlorine residual, the pool with the correctly set pH is the one safe for your children to swim in. With Chemigem the effectiveness of the chlorine is no longer a guess – it is a measured pool water quality parameter that you the user are able to set.

## LIKE AN INDUSTRIAL PROCESS CONTROLLER FOR YOUR POOL

Chemigem uses an advanced FLASH-based processor with proprietary algorithms to watch over your pool and filtration system functions. There is a versatile control system for operating and programming. The LCD display shows you the condition of your pool water and what Chemigem is doing about it. The display is also used to provide information about the timer. If the unit is turned on for a quick swim and the user forgets to turn it off afterward it will simply turn off at the next programmed off time. There is even a provision for running the unit for a set period from 1 to 48 hours – great for a quick swim, filtration boost or superchlorination. The unit will even allow an external timer to take control if a home/pool automation system is already installed.

## THE VERSATILITY OF DIFFERENT MODELS OFFERING ALTERNATIVE CHEMICAL DELIVERY SYSTEMS

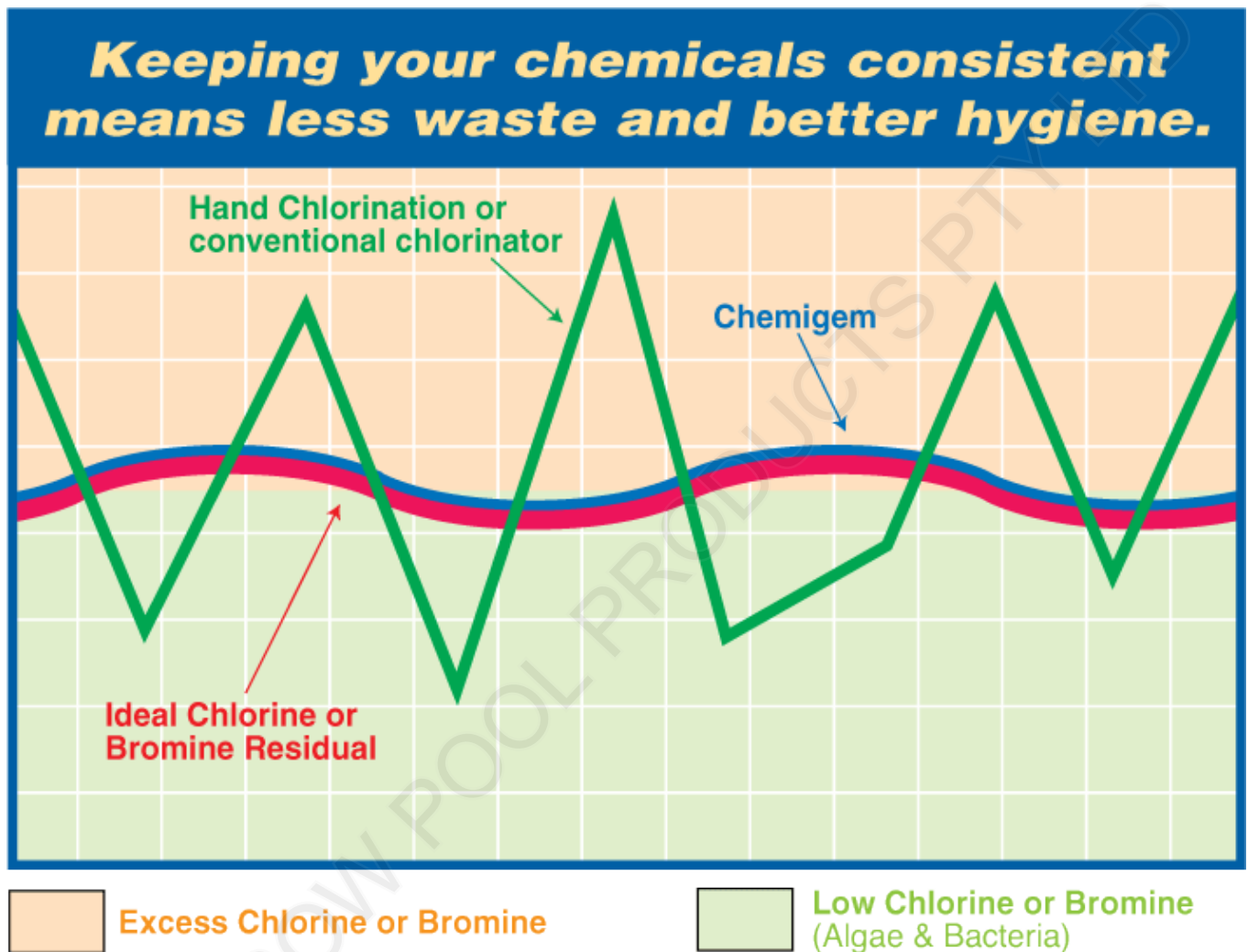
Chemigem has two main versions – the DM52 for domestic pools and the CM55 for large commercial pools. Each of these versions can control various ways of feeding chemicals into the pool water flow: vacuum valves (with/without venturi injectors), peristaltic pumps (12V and 240V) and even solenoids for erosion feeders.

Chemigem also come in models that can control Salt Water Chlorinators for pool owners that like that method of sanitation.

## GENERAL DATA: DIMENSIONS, ELECTRICAL, APPROVAL

| Chemigem Model             | Primary Use              | Sensing | Injection / Control Method | Clock / Timer |
|----------------------------|--------------------------|---------|----------------------------|---------------|
| Chlortrol CA2 <sup>2</sup> | General /Domestic Pools  | NO      | Vacuum Valves              | NO            |
| Chlortrol C1 <sup>2</sup>  | General / Domestic pools | NO      | Chlorine Valve             | NO            |
| Chlortrol A1 <sup>2</sup>  | Geral / Domestic Pools   | NO      | Acid Valve                 | NO            |

<sup>2</sup> = Simple chemical dosing unit.



## INTRODUCTION

Congratulations on the purchase of your new CHLORTROL.

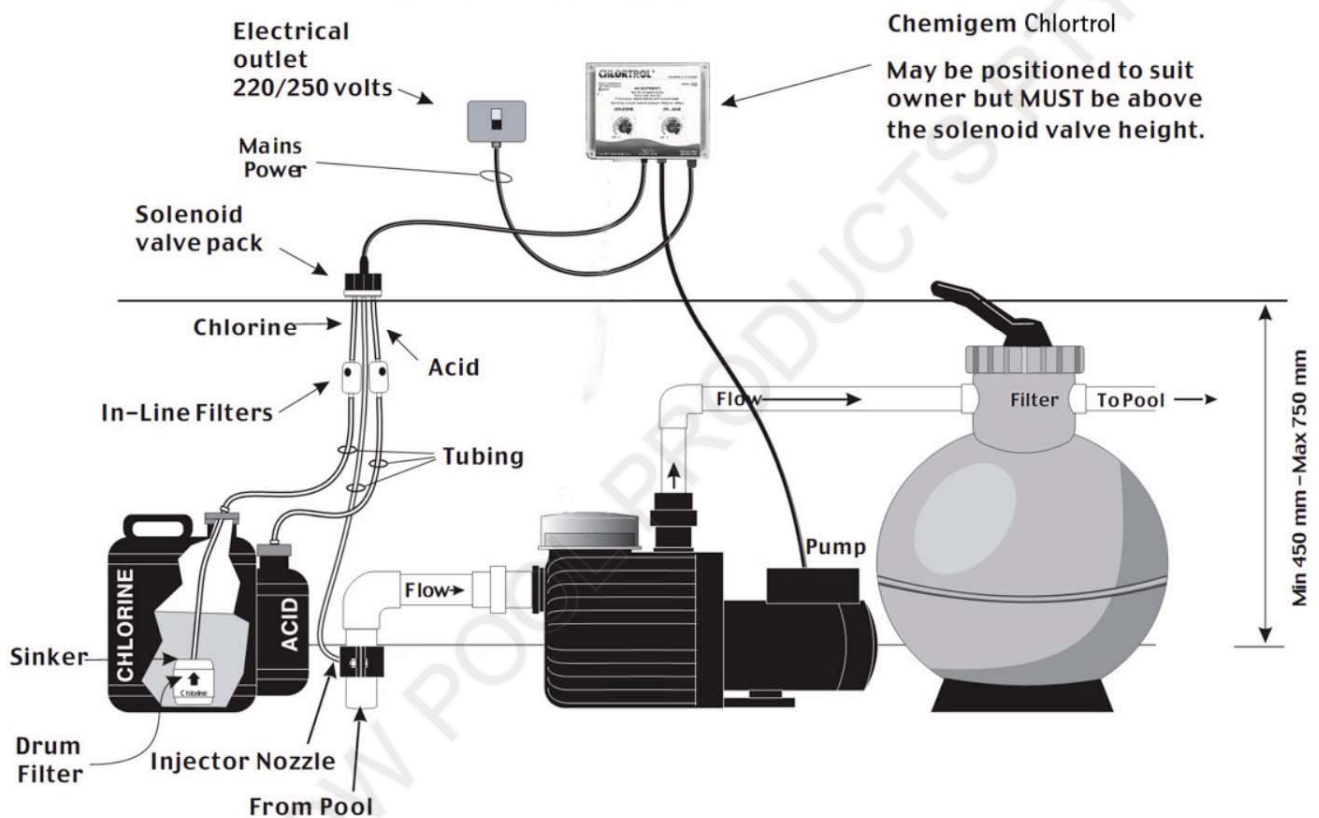
The CHORTROL is designed to help ensure your water is correctly adjusted. It will do this when the pump/filter is running, but remember that every water body is different and it is necessary to check that there is good mixing for the CHLORTROL to work at its best and most efficient.

CHLORTROL will treat your water but if not installed correctly you will not get the best results. Therefore please ask your dealer to explain anything which is not clear.

Understanding your CHLORTROL doser will make sure you get the very best performance from it, so please read your manual carefully.

## INSTALLATION

### INSTALLATION DIAGRAM



The above diagram shows the basic installation. The principle behind the operation is to use the pump suction to draw chemicals through the solenoid valve when the pump is running. The pump inlet has a vacuum (suction or negative pressure) that will draw chemical through the valve and into the water flow.

### Electrical Supply

The CHLORTROL unit requires a supply voltage of 220/250Vac and must be connected to the pump operating circuit so that it will only operate when the pump is running – **THIS IS IMPORTANT !**

## INSTALLATION PROCEDURE

The first step is to check for any air-leaks in the existing circulation system. Pay particular attention to the hair and lint pot filter (the filter actually in the pump, having a transparent lid) to see if there are any bubbles swirling around in it which do not completely clear within 2-3 minutes. If such air-bubbles are remaining then it is likely the system has an air-leak in the suction line between the water body and the pump and this should be investigated before proceeding to install the injection point.

- Installing the Unit

### LOCATION

For ease of installation and for safety, the Chlortrol must be installed as follows:

- In a normal upright position (with the printing on the front reading horizontally) and protruding cords facing toward the ground.
- Attached to a solid vertical surface to provide easy access to the power supply and should preferably be fixed at eye level.
- To obtain maximum life for the unit it is recommended that it be located in a sheltered and shaded position.



#### Injection Point Position

The injection point must be installed before the pump, ie. The suction side! The injection point should also be installed in the vertical position.

### Installing the CHLORTROL control unit

**NOTE:** The CHLORTROL control unit is fully approved to be fitted in prescribed areas such as the swimming pool zone.

Fitting the control unit to a convenient wall or timber post is easy using either the masonry anchor screws or the self-tapping screws included in the kit.

**NOTE:** To comply with Australian electrical safety standards do not fit the control unit lower than 500mm from the ground surface.

- Tubing Connection  
Connect the tubing from the valve to the injection nozzle and push fully on.
- Chemical Drum Placement  
Position the chemical drum and drill 2 holes in its cap, one slightly larger than the diameter of the feed tubing and the second a breather hole approx 2mm, this will prevent the drum wall from being sucked in if drum runs dry.

Connect the tubing to the CHLORTROL valve inlet. Lay the tubing neatly to the drum and pass it through the hole in the lid. Measure the tubing against the outside of the drum so that the drum filter is about 2.5cm above the bottom of the drum and apply some electrical tape to the tubing above the cap to prevent the tubing from slipping further into the drum. Then place the sinker onto the tubing with the drum filter and lower the drum filter and sinker into the drum and tighten the cap.

- **Starting and Operating**

The simple to use CHLORTROL can dose all sizes of water bodies (up to a max of 120,000 Litres). Adjusting the rate of dosing will allow you to keep the correct levels throughout the year when the pool pump is running. For the average size pool set the dial to half way, this is only a suggestion because you have to take into consideration the bather load and how long you want to run your pump and filter. To achieve the correct levels use a good quality test kit and if necessary adjust the setting to the Chlortrol it is a timed doser and the dials allow you to turn the amount of chemical you need up or down, we suggest that you run the system for 8 hours and then test then adjust if necessary. Operating vacuum must be between –20kpa to –50 kpa

- **Description of On-time and Off-time**

The Unit on the CHLORINE side has a range of “0” which is off and midway is 6 seconds on and full is 12 seconds which is the amount of time the unit feeds for. The off time or wait time is always 15 minutes. The CHLORTROL on the ACID side has a range from “0” which is off and midway is 6 seconds on and full is 12 seconds on which is the amount of time the unit feeds for. The off time or wait time is always 45 minutes.

- **Maintenance**

THE SINGLE DOSE CHLORINE UNIT MUST HAVE THE INJECTION POINT CHECKED AND CLEANED REGULARLY AS THEY CAN BLOCK.

- **Mains Cable**

Should the mains electricity supply cable ever become damaged in any way, the complete controller must be returned to the manufacturer or its authorised service agent.

- **Caution**

When handling pool chemicals please refer to suppliers handling & care instructions.

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