



Quick Start Guide to Vibrex – Vibrex Mini

Vibrex is Grayson's Stabilised Chlorine Dioxide formula allowing for safe and effective water sanitation. It is made up of a two-part solution mix with an Activator and the Horticare solution mixed 1:1. The Vibrex Mini has been designed as a safe and affordable alternative to larger dosing systems where continuous dosing is a requirement.

The below guide will help in getting the system started.

You will require the following products:

- **Vibrex M12 Activator 20L**
- **Vibrex Horticare 20L**

System Requirements:

- Flows must not exceed 18 m³/h (18,000L/h)
- Pressure must not exceed 8 bar
- Outlet socket: 230 V/AC, 50/60 Hz

Safety Requirements:

- Avoid contact of Horticare/Activator with skin/eyes at all times – See SDS for further information
- During the mixing procedure please wear appropriate eye protection, with nitrile gloves in a well-ventilated area. Otherwise use suitable respiratory equipment.
- A bunding or containment area is also required to prevent loss of containment when drum contains Vibrex
- Store Horticare and Activator products separately when not in use

Initial Set Up:

1. Place supplied drum close to an appropriate dosing point. Ensure it is a flat/level surface while also maintaining accessibility with a nearby power source (230V, 50/60Hz)
2. Install the Magdomat proportional dosing pump in your desired configuration with adaptors for 2" thread. (Required fittings not included). Ensure the pump is orientated in the correct direction – check the arrows on the flowmeter
3. Attach the power source using the supplied power plug and leave the power OFF until the drum has been filled with activated solution
4. Fill the drum with the chemicals at the specified dilution – following the procedure outlined below
5. Turn on the power and prime the pump by running it on Manual mode – see Operation (Sect. 4-4.1) in User Guide. Ensure water is running through your irrigation while priming
6. Once primed, switch the pump to EXT (external) mode and calibrate accordingly using a DPD based test kit (or similar). See Operation (Sect. 4-4.1) in the included User Guide

Chemical Fill Procedure:

1. Ensure pump is turned OFF during this process
2. Undo the hose fitting on the 200L drum and check the drum is below the minimum level (indicated by the external marking)
3. If so, measure and add 10L of Vibrex Horticare to the drum
4. Measure and add 10L of Vibrex M12 Activator to the drum, immediately replace the cap, leave the solution to react for 10-15 minutes before attaching original hose fitting and applying the water source.
5. Slightly agitate the solution and let it set for at least 10 minutes to completely activate the Vibrex solution
 - a. Safety Disclaimer – Minimise exposure and use suitable respiratory equipment as gas can be produced during mixing
6. After 10 minutes turn on the water source and fill the drum up to the 200L mark

7. Ensure power outlet is on and press start on the pump – check pump is in external (EXT) mode and not manual (MAN) (Sect 4.0)
 - a. May need to run the pump in Manual initially for priming purposes. Use the vent on the head to discharge air within the tubing/head
8. Run water through flowmeter to check if a pulse signal is being sent to pumps and pump is dosing accordingly
9. Run Chlorine Dioxide testing on the water with appropriate DPD test kits. Calibrate if necessary (Sect. 4.1)
10. Repeat this process each time the activated drum solution is depleted below the Low-level marking

Note: The activated solution will only remain effective for approximately **one month** following mixing. If the solution has been sitting for an extended period of time, please safely drain and rinse heavily then refill drum as per the above method.

Measuring Chlorine Dioxide Levels (w/ CheckIt Comparator) – Sold Separately

Using the CheckIt Comparator, DPD1 tablets and the conversion chart you can quickly determine the chlorine dioxide residuals in you water. A spare conversion chart is at the rear of this manual (Sect. 7). Please note that treated samples should be observed at the furthest discharge point to ensure there is adequate residual distributed throughout the system.

1. Collect 10mL of treated water (to the upper most raised line on vial) in both vials in the kit
2. Without adding anything to one vial, place it in the left opening above the already coloured window with frosted dot facing forwards.
3. With the second vial, add 1 DPD1 tablet and crush with the pre-cleaned rod. Stir (or shake with cap on) until dissolved. Do not touch tablet or contact solution with skin as this will affect the result.
4. When the tablet has completely dissolved place in the right window with frosted dot facing forwards.
5. Remove the caps and aim vials diagonally to a light source such as the sun.
6. Rotate the colour wheel on the right side until a colour match occurs in the windows.
7. Read the number and use the included chart to convert the Comparator reading (left column) to concentration (middle column). Advice on the concentration is given (right column) so appropriate adjustments can be made.

Photometer test kits are also available for Chlorine Dioxide testing (Contact us for availability).

P15 Plus Photometer 0.02 to 11 ppm ClO₂

Highly precise tool for measuring Chlorine Dioxide over a broad range of concentrations. Suitable for all Chlorine Dioxide users from nurseries to vegetable washing applications. A DPD1 tablet is added to the sample after calibration and a LED light source directs light through the sample to measure the chlorine dioxide concentration. The Photometer employs high quality interference filters which are able to rapidly provide accurate, repeatable results.



Low Range/High Range CHECKIT Comparator 0.038-0.57 ppm/0.38-7.6 ppm ClO₂

This affordable solution allows readings of Chlorine Dioxide via visual inspection. A DPD1 tablet is dissolved in one vial and compared to a plain filled vial. By rotating a colour wheel, a reading is obtained which can be converted to concentration using a chart



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