E2O™ Q&A

How safe is E2O™ if ingested?

The proprietary ingredient in E2O™ is HUWA-SAN® Peroxide Technology, which is certified by NSF International as a drinking water additive.

Hydrogen peroxide sold at your local pharmacy, and used as a mouth rinse, contains 3% hydrogen peroxide which is equivalent to 30 000 parts per million (ppm). The regular treatment of E2O™ is 1 pump of product diluted with 700mL of water, equivalent to 20 ppm. Even at the concentrated shock level, the amount of peroxide is only 100 ppm. Remember that the shock treatment is not done during patient procedures and the lines are purged afterwards.

A tooth whitening strip (directly placed in your mouth) contains 500 times more hydrogen peroxide than E2O™ (placed in your waterlines).

Why do I need to shock with E2O™ if I am using the product daily?

The 20 parts per million (ppm) hydrogen peroxide in your E2O™ regular treatment is enough to prevent bacteria and biofilm from growing. However to remove established biofilm, you need the 100 ppm hydrogen peroxide E2O™ shock treatment. This is why a shock treatment is recommended before initial product use – to clean out the waterlines; then shock should be performed at least monthly as biofilm and bacteria can accumulate. Total dental unit waterline care requires not only waterline maintenance, but also shock treatments and monitoring.

Can E2O™ be used as a shock treatment for other waterline treatment products?

Yes, E2O™ is an excellent way to shock your waterlines regardless if you are using E2O™ as your regular maintenance product. E2O™ shock treatment is compatible with many other waterline treatments. After the E2O™ shock treatment, remember to purge your lines before continuing with your regular waterline maintenance. Note: Be aware of what is running through your waterlines; mixing certain chemicals can cause unwanted reactions. For example, bleach based products are incompatible with E2O™; silver nitrate in combination with bleach or sodium percarbonate can lead to black deposits on brass parts or plastic lines. Before changing your current waterline products, especially after prolonged use, check with Germiphene regarding product compatibility, and whether a pre-treatment is recommended before E2O™ can be introduced into your waterlines.

Can I leave the E2O™ shock treatment over the weekend?*

The shock treatment should remain in the lines at least 6 hours, ideally overnight. The shock treatment can be left over the weekend, unless your system contains brass parts, in which case these may change colour from extended exposure to the hydrogen peroxide. It is not recommended to leave the shock in the lines longer than a weekend.

Why should I test my water when I am performing regular cleaning/maintenance?

There are many factors that affect the efficacy of a waterline cleaning product, including the water source itself or even human error. Complete dental unit waterline care requires not only waterline maintenance, but also shock treatments and monitoring. Germiphene has two waterline testing kits, E|Line™ and E|One™. Contact your Germiphene representative to find the best option for your office water.

How often should I monitor my dental unit waterlines?

Always check manufacturer's instructions first. Germiphene waterline testing kits, E|Line™ and E|One™, recommend quarterly testing from at least one line/source. Do not always test the same line/source. All lines/sources should be tested at least once a year. In addition, the cuspidor cupfill should be tested quarterly. During the warmest quarter of the year, test monthly instead of quarterly. Ask your Germiphene representative for scheduling tips.

In Office Waterline Monitoring Kits

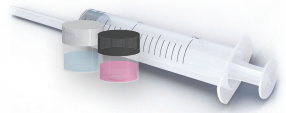
E|Line™ Water Quality Check Kit

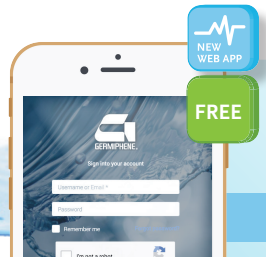
- Results in 24 hours
- Dry block incubator required
- 2 Vials per test: (1) Total Bacteria + Fungi AND (2) *E. coli* + *faecal coliform*
- Colour coded results



E|One™ Water Quality Indicator

- Fast 1 hour results, no incubator necessary
- One test vial for bacteria, biofilm and fungi
- Clear, colour coded results





Schedule waterline tests + record results with ease and accuracy.

To be used with: E|One + E|Line™

Ask us how to get started today!

GERMIPHENE®
1.800.265.9931
www.germiphene.com

E2O™

Dental Waterline Maintenance & Shock Treatment

First Time User Guide



For use in independent dental water bottle systems. Professional use only. Use E2O™ in conjunction with a waterline test kit such as E|Line™ or E|One™.

Complete dental unit waterline care requires: shock treatments, maintenance, and monitoring.

2 in 1 **E2O™ can be used as both a daily water maintenance treatment, as well as a shock treatment when mixed at a higher concentration.**

E2O™ Shock Treatment

- A higher concentration of E2O™ than the regular maintenance treatment.
- When to perform a shock treatment:
  1. Before initial use of E2O™ to clean out your system.
  2. Afterwards shock monthly to remove any biofilm accumulation and/or as needed (if testing indicates bacteria above acceptable levels).
  3. When the unit has not been in use for 4 or more days AND the lines are left without water and waterline treatment.

E2O™ Shock Treatment

Directions

Please note the shock treatment is measured per chair, regardless of the size of your water bottle.

Shock treatment should be performed at the end of the day, after the last patient AND ideally on a day when someone will be returning the following morning.* (See Q&A)

1. Remove water bottle from unit and empty any remaining regular treatment from the water bottle.
2. Check inside the water bottle for residue. Always wash the bottle with soap and water prior to shock treatment.

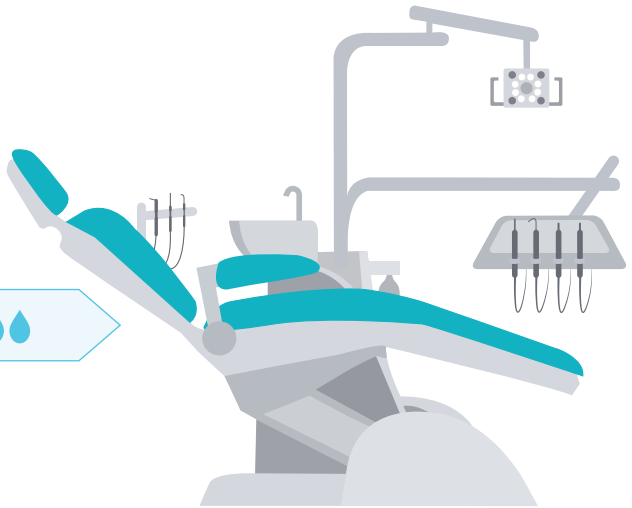
Shock treatment per chair:
5 pumps E2O + 700mL water

3. Add the required amount of E2O™ to the empty water bottle, then dilute with potable water (tap water or distilled water) appropriately.
   - Adding E2O™ prior to filling bottle will reduce splatter and ensure product is properly mixed.
   - Shake the bottle well to ensure the shock solution comes in contact with all the interior surfaces of the bottle.
4. Reattach the bottle to the unit.
5. Ensure no attachments are on the lines (handpieces, air/water syringes, ultrasonic and/or piezo scalers).
6. Place the lines into a sink and purge the lines ensuring that the shock treatment has passed throughout the lines and that lines are full. Leave the shock treatment in the lines overnight.
7. In the morning remove the bottle and empty any remaining shock treatment.
8. Fill the bottle with E2O™ Regular Treatment. Reattach bottle to unit.
9. As per current standards/guidelines and to remove any shock treatment, purge the lines into a sink, with no attachments, for 2–3 minutes. Removing the attachments is an important step, as you do not want any debris from this treatment lodging in the attachments.

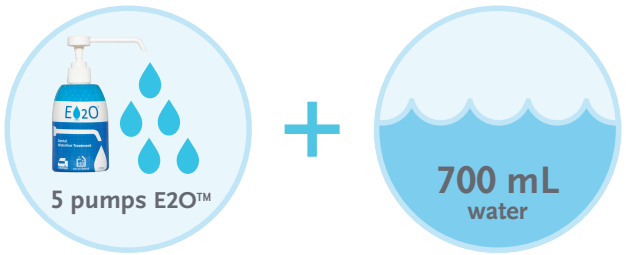
▶ *Continue to use the E2O™ regular treatment, refilling as needed.*

▶ *E2O™ regular treatment/E2O™ shock treatment maintains efficacy for up to 2 weeks when diluted.*

E2O™ Shock Treatment | Dosage Chart



Per Chair



E2O™ Regular Treatment

Directions

700mL water bottle: 1 pump E2O™	💧
2L water bottle: 3 pumps E2O™	💧💧💧

When water bottle is empty, add required amount of E2O™ to water bottle (dose dependent on water bottle size). Proceed to fill water bottle with potable water (tap water or distilled water) to regular fill. Adding E2O™ prior to filling bottle will reduce splatter and ensure product is properly mixed.

Best Practices

- ☑ All waterlines should be purged at the beginning of each work day by flushing them thoroughly with water for at least 2 to 3 minutes. Before purging is carried out, handpieces, air/water syringes and ultrasonic scalers should be removed from the waterlines.
- ☑ Any attachments with a water source (including handpieces, air/water syringes, ultrasonic/piezo scalers, endo handpieces, and implant devices) should be run for 20 to 30 seconds after patient care in order to purge all potentially contaminated air and water. The attachment should then be removed and, following cleaning and disinfection of clinical contact surfaces, another sterilized attachment is to be used with the next patient.
- ☑ Always follow manufacturer's instructions for use.
- ☑ Complete dental unit waterline care requires not only continuous waterline maintenance, but also shock treatments and monitoring.
- ☑ Be careful not to touch the tubing with fingers or soiled gloved hands when changing the water coolant bottle, as this can easily contaminate the entire system.
- ☑ Educate and train staff on managing dental water quality.

