**Purchase of Dispensers**

- Purchase products with international certification, which normally includes testing of product safety, such as those certified by the WaterMark of Australia, NSF/ANSI of the US and the Water Regulations Advisory Scheme (WRAS) of the UK or:
  - ![WaterMark](image1.png)
  - ![NSF](image2.png)
  - ![WRAS](image3.png)

- Purchase products with type test reports issued by HOKLAS-accredited laboratories confirming that boiled water complies with the WHO provisional guideline value for lead and that the products use lead-free soldering material and low lead content components (less than 1%).

- A licensed plumber should be engaged to install the dispenser and conduct a lead check on the soldering material at the inlet inside the dispenser to confirm that it is lead-free before using the dispenser.

- New dispensers should be cleaned thoroughly with water and undergo at least four times of boiling with one-third or one-quarter full of fresh tap water before it is used for drinking purposes.

**Illustration of Quick Lead Check on Wall-mounted Dispenser**

1. Squeeze and crush the barrel of the swab.

2. Shake and squeeze the barrel of the swab.

3. After draining away the water in the dispenser, rub the swab on the soldering material at the inlet inside the dispenser. Prevent any solution from dropping into the water dispenser by placing a wet cloth under the rubbed surface.

4. The pink colour is observed on the soldering material after rubbing the swab indicates the presence of lead. Remove the colour and solution on the solder surface with a wet towel. Clean the dispenser with water before using for drinking purposes.

* Please refer to the detailed instructions as stated in the instruction manual before using the testing kit to conduct a lead check. Different kinds of testing kits are available for sale at some hardware stores.
Potential Sources of Lead in Drinking Water in Dispensers

- Leaded soldering material is a major source leading to excessive lead in drinking water in dispensers after boiling. It should not be used in the fabrication of dispensers.
- Copper alloy components of new dispensers leach comparatively more lead in hot water when they were used for the first time but the amount of lead would reduce after a few boiling and draining away cycles and would not cause excessive lead in drinking water.

Lead Checking for Dispensers

- If you want to make sure that your existing dispenser is lead-free, you should conduct a lead check or arrange to take a boiled water sample for testing of lead. Replace the dispenser if the lead check confirms presence of lead or lead in water exceeding the World Health Organization’s (WHO) provisional guideline value.

You should adhere to the following procedures for taking a boiled water sample from the outlet tap of the dispenser:

(a) Take a water sample only after the water inside the dispenser has been cooled down naturally;

(b) Fill the water into a polyethylene sample bottle (250 ml) prepared by a laboratory accredited by the Hong Kong Laboratory Accreditation Scheme (HOKLAS) and do it carefully to prevent overflow;

(c) Put the cap back on the sample bottle, ensure that it is tightly closed and put on labels (with the sampling location, date and time); and

(d) Store the water sample in an icebox with freezer packs and deliver it to the laboratory on the same day.

Leaded soldering material

Copper alloy components

The amount of lead leached from them will reduce after a few boiling cycles

Things to Note when Using Dispensers without International Certification

1. Conduct regular cleaning of the dispenser every six months to prevent accumulation of dirt or other impurities according to the procedures below:

   (a) Ensure that nobody takes water from the dispenser during the cleaning for drinking;

   (b) Top up the dispenser and boil the water;

   (c) Isolate the power supply and add a small amount of mild fruit acid (citric acid) in powder form (about 20 grams for a 20-litre dispenser) into the dispenser;

   (d) Keep the water in the dispenser for about an hour;

   (e) Start the draining cycle by closing the inlet valve and then drain away the water inside the dispenser;

   (f) Commence another draining cycle by opening the inlet valve for about one minute and then drain away the water in the dispenser again; and

   (g) After four or five draining cycles, fully open the inlet valve and resume the power supply when the tank is full.

2. Switch off the power of the dispenser every night and during long holidays to avoid continuous automatic heating, which may increase the amount of lead leached into the water in the dispenser if it contains leaded material / components.

3. Drain away the water in the dispenser every morning. The drained water can be stored for non-drinking purposes.