



Hard water

What to do if you have hard water

What is hard water?

Many areas throughout Western Australia relying on groundwater supplies have 'hard' water. Hardness is a measure of the concentration of calcium and magnesium salts in water. Natural water sources contain two types of solids – suspended and dissolved. Suspended solids, like sand or silt, can be removed from water by leaving it to settle for a period of time. But as settling is not always practical, most suspended solids are removed by some type of filtration. Dissolved solids like calcium and magnesium are common in many supplies across the State and make the water 'hard'. These natural minerals are dissolved as water moves through soil and rock and cannot be removed by filtration.

The degree of hardness becomes greater as calcium and magnesium content increases. The Australian drinking Water Guidelines define elevated hardness as 200 milligrams of calcium and magnesium salts per litre of water. Hard water reacts chemically with soap and the higher the hardness, the more soap is required to form lather.

Hard water may also leave spots on drinking glasses, shower screens or garden plants because the minerals remain after the water has evaporated. Hard water may also have a scaling effect on hot water systems, pipes, fittings and domestic appliances such as kettles, with the natural salts being converted to white crystals.

Is it safe to drink?

Ongoing tests confirm that the water we supply to customers meets all health guidelines and is safe to drink.



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Calcium staining To avoid spots caused by hard water use liquid soaps and dry wet surfaces immediately after water use. You can also use cleaning products that remove calcium and lime deposits, scale and discolouration from bench tops, appliances, toilets, sinks, bathtubs, tiles and glass. Hot water systems To prevent scale build - up in your hot water system you should release the pressure valves for a few seconds each month Kettles Put a slice of lemon in the kettle fill with water and bring to the boil, then refill before next use bicarbonate soda and vinegar based cleaning products to clean domestic appliances, making sure to rinse thoroughly before use

What to do if you have hard water How do you know if you have hard water?

The Perth Metropolitan Water Supply Scheme, supplied by surface water, desalinated water and some groundwater meets the national guidelines for hardness levels. Country customers are more likely to experience hard water because they are supplied primarily by groundwater sources. You can find out how hard the water in your area is by calling our Faults, Emergencies and Security line on 13 13 75. If you are installing a new dishwasher, you should find out if your area has hard water. If it does, consider a dishwasher that is suited to hard water and use the recommended dish washing products.

What is getting done about it?

We have conducted a number of successful trials in various country towns and a Calgon the brand name for sodium hexametaphosphate, dosing program is being progressively implemented in affected areas across the State. Although Calgon does not reduce hardness levels, it reduces the scaling effects caused by hard water. It is a registered food additive (No. 450) and has been approved by the National Health and Medical research Council. We have also begun a long term program to install desalination treatment technology at country water supply schemes with high salinity levels. This treatment process will improve aesthetic water quality, reducing hardness levels.