

Customer Factsheet

TVC in Bottled Water Coolers

The BWCA is an industry association and accreditation body that:

- promotes water and hydration for employee health, productivity and wellbeing
- provides an informed choice between bottled or mains-fed coolers
- requires strict standards of hygiene, cooler installation and sanitisation

Introduction

Customers may have water from their cooler tested for many reasons. One of the most common complaints received in relation to water testing is, 'Please come and service my cooler as we have been advised not to use it due to a high (or abnormal) TVC level'.

What is a TVC?

TVC stands for Total Viable Count, also called HPC (Heterotrophic Plate Count), or shown as CFU (Colony Forming Unit). It is a count of the generally harmless, environmental bacteria which will grow in the water in your cooler.

Why does water from my cooler have a 'higher' TVC than my mains water?

Mains water is treated by the supplier and contains residual disinfectant, usually chlorine. This stops bacteria growing in the water. Bottled water contains no preservatives, which means that the harmless bacteria present in the water are able to grow to high numbers.

What does a 'high' or 'abnormal' TVC mean?

A result may be flagged as 'high' by a water testing company which has set its own standards for TVC, based on regulations which are not applicable to water coolers.

The number of bacteria in a bottle of water will increase from almost undetectable levels at bottling to sometimes hundreds of thousands per ml over the shelf life of the water. Coolers will inevitably pick up some bacteria from the environment and from users, particularly at the taps. A TVC would have to be in the millions per ml before it would be considered to be 'abnormally high'.

Are the TVC bacteria harmful?

TVC bacteria are harmless except for infants or people who have been told that they must boil their drinking water for medical reasons.

What does the law say?

There are TVC standards for the water immediately after bottling, which are checked when the water is produced. However, there are no TVC standards in the regulations for bottled water at the point of use.

There ARE standards for particular bacteria such as E.coli. If these are found then there may have been dangerous contamination of the water, which must be investigated.

What is a normal TVC level?

'Normal' will vary from cooler to cooler as it will depend on many factors, including:

- Storage conditions of the bottles of water
- Age of the bottle of water on the cooler
- How much the cooler is used, and how long since the last cooler sanitisation
- Hygiene of users and environment
- How well you clean the cooler between sanitisations.

Should I try to reduce the TVC?

These are harmless bacteria. You might drink more than 500,000 of these bacteria per ml of milk within its shelf life, and eat millions in a salad. TVC bacteria could build up inside the cooler to a level which causes an off-taste in the water, but this is very unlikely to happen in a cooler which has its quarterly service by your BWCA supplier member.

However, to keep the water quality at its best it is important to:

- Store your bottles in a dry, cool place away from direct sunlight and strong odours
- Use the bottles in date order, oldest first
- Always remove the protective cap sticker just before loading the bottle onto the cooler, and load the bottle hygienically
- Preferably use up the bottle within 3 weeks of loading onto the cooler
- Use the cooler every day or dispense up to 5 litres at least once a week to refresh the system
- Empty and clean the drip tray
- Clean the taps frequently with food -safe sanitiser spray or wipes.

What are the benefits of using a BWCA Member?

Your BWCA supplier member must follow the 'BWCA Code of Practice'.

This means that everything from water sources and bottling plants to cooler installation and maintenance are independently audited to ensure that you receive the highest level of service.

Summary

- Where only TVC bacteria are found, there is no need for an additional cooler service
- TVC bacteria are harmless
- It is normal for water coolers to have a much higher TVC than mains water
- Bottled water coolers can be used by everyone except those who must have boiled drinking water
- Preferably use up a bottle of water within 3 weeks of loading it onto the cooler
- Use the cooler every day or dispense up to 5 litres at least once a week to refresh the system
- Clean the taps and drip tray frequently using food -safe sanitiser spray or wipes
- Always choose a BWCA supplier member.

Still worried?

Call your BWCA supplier member, who will be happy to advise you further and answer any questions.

www.bwca.org.uk