



Technology Note 37

# Purelab® Chorus

A different approach  
to sanitization

## Technology Note 37

# The Importance of regular sanitization

**After organic and inorganic chemical impurities are removed, bacterial growth can still occur, even though very pure water provides an extremely harsh environment with minimal nutrient content.**

Remaining trace impurities, materials of construction in contact with the pure water and debris from dead bacteria can act as sources of food.

If this bacterial growth is not minimized, it can cause problems to the purity of the water required which may impact on any test work results.

The bacteria themselves are not the only problem; they also produce endotoxins and nucleases. Endotoxins are fragments of cell membrane that are released when cells die and during bacterial cell metabolism. They can cause serious interference in many laboratory techniques where water or prepared reagents will come into contact with DNA or RNA and can be affected by nucleases in the water.

The inside of most water purification systems consists of long lengths of pipework, connectors, reservoirs and filters which present a high surface area for bacteria growth. A sanitization regime is suggested as part of the maintenance schedule. This is recommended for most water purification systems to minimize the build up of particles, biofilm, micro-organisms and bacterial by-products.

Our products are designed to ensure that all wetted parts are sanitized as simply as possible. The majority of systems use rapid dissolving chlorine based tablets and a pre-programmed sanitization procedure. However, we recognise the inconvenience involved in this crucial maintenance procedure.



## Technology Note 37

# Why can we sanitize the PURELAB® Chorus less frequently?

The PURELAB Chorus is a low volume system. It has been designed with minimal internal pipework, components, and a high efficiency UV system, and as such the scope for biofilm build-up is reduced.

The point of use filters available have demonstrated their ability to provide the required bacterial and endotoxin control when used as recommended.

Bacteria will still grow within any water purification system, so if micro-organisms are of concern for the application, it is important to monitor and sanitize the unit to prevent the bacteria levels reaching levels that affect the efficiency of the point of use filter.

The PURELAB Chorus uses a unique, simple to use, sanitization procedure that should only be required infrequently (once a year).

### Easy and quick sanitization

Sanitization of the PURELAB Chorus is a simple procedure which cleans all wetted parts of the unit, including the handset and point of dispense. The sanitant and quenching agent is supplied in a single and safe to handle cartridge which means no harsh chemicals need to be ordered, handled or mixed. The sanitization pack replaces the purification pack. The sanitization procedure can be simply selected on the dispense handset and does not generate any hazardous chemical waste, as the sanitant is absorbed and neutralized within the specialist sanitization pack.



ELGA LabWater

T: +44 (0) 203 567 7300

F: +44 (0) 203 567 7205

E: [info@elgalabwater.com](mailto:info@elgalabwater.com)

W: [www.elgalabwater.com](http://www.elgalabwater.com)

ELGA® is the global laboratory water brand name of Veolia Water. VWS (UK) Ltd.

Registered in England & Wales No. 327847 © Copyright 2019 ELGA LabWater/VWS (UK) Ltd.

All rights reserved. As part of our policy of continual improvement we reserve the right to alter the specifications given in this technology note. Technology Note 37. P015\_Popular\_Channel\_Partner Collateral\_Update\_Branding\_Oct\_2019