

FAQ

PURELAB® Chorus 1 Xe

Frequently Asked Questions



ELGA  VEOLIA

Chorus 1 Upgrade Questions

What PURELAB products have Mercury Free UV?

The Chorus 1 Life Science and Analytical Research models can now incorporate an innovative, environmentally-friendly UV-C lamp. This cutting-edge technology boasts a remarkable five-year lifespan while completely eliminating the need for mercury.

Can the UV be retrofitted?

It's important to understand the fundamental differences between mercury-based and xenon-based UV systems. These technologies are not interchangeable due to their distinct operational requirements. Mercury-based systems are specifically designed to work exclusively with mercury-based UV lamps, while xenon-based systems are engineered to operate solely with xenon lamps. This is due to power and safety requirements for the xenon lamp.

Can I still get the Chorus 1 models with Mercury UV lamps?

Yes, the Hg UV Chorus 1 products are still available (PC1LSCXM2 and PC1ANRXM2) for customers that are not required to meet Hg-free specifications.

However, the Chorus 1 General Science (PC1GSCXM2) will be withdrawn from sale from 15/02/2026 to maintain a more streamlined product portfolio. Associated with the Product Bulletin for this obsolescence is a Feedback Form providing a direct channel for you to raise any concerns regarding products that have been made obsolete or are scheduled for obsolescence. Each submission will be reviewed by ELGAs planning team, so any information regarding impacted markets and sales figures should be provided to help us assess the situation effectively.

For the most up-to-date and accurate information tailored to a user's specific location, ELGA recommend contacting their dedicated Partner Support team.

Does the Chorus 1 Complete-TOC have Mercury Free UV?

No, currently the PURELAB Chorus 1 Complete-TOC utilises established mercury-based technology for its UV purification system. However, ELGA is committed to ongoing innovation and environmental responsibility, and is monitoring customer demand for the mercury-free UV.

Chorus 1 Upgrade Questions

Why do the PURELAB Flex 3/3+ not feature the Mercury Free UV?

The decision to maintain the current UV technology in the PURELAB Flex 3/3+ was driven by strategic considerations. Incorporating the advanced xenon-based UV system would have significantly extended the development timeline and increased production costs. This, in turn, would have impacted the product's market positioning. However depending on the success of the xenon lamp in the Chorus range, the introduction of this technology in the Flex 3/3+ might be a possibility in the future.

Is there a new product code?

Yes. The Chorus 1 Xenon products have the following part codes:

- PC1LSCXM2-XE
- PC1ANRXM2-XE

Will the Xenon UV be made available to the rest of the product range in the future?

Sustainability is undoubtedly a crucial factor in ELGA's product development decisions. However, market dynamics and customer preferences must also be carefully considered. The adoption of mercury-free UV technology represents a significant shift in the lab water purification industry, and its impact on market share is still being evaluated.

UV Lamp Questions

How long does the UV last?

The Xenon UV system boasts a recommended replacement interval of 60 months (5 years, based upon >10,000 hours operational lifetime under typical usage conditions), offering a significantly longer lifespan compared to alternative UVs in competitor systems. This extended durability not only reduces maintenance frequency but also enhances its ability to effectively lower Total Cost of Ownership. This lamp lifetime is based on a typical usage pattern of ≤ 22 dispenses per day, 5 days a week.

Why does the Chorus 1 not use UV LED?

Total Organic Carbon (TOC) reduction requires ultraviolet (UV) light with a shorter wavelength than is possible with current LED technology. To achieve the necessary wavelength and ensure optimal TOC reduction, ELGA and other industry leaders utilize xenon lamp technology. Xe Excimer lamps can produce the required energy for TOC reduction in UPW processes, making them the preferred choice for this critical water purification process.

Does the 172 nm wavelength have any benefits on product water quality?

Regarding the 172 nm wavelength technology, it's important to note that this specific feature does not directly impact the water purification process or the quality of the final product water, compared to that when Hg UV is used. As such, the performance data sheets for the Chorus 1 Analytical Research and the Chorus 1 Life Science remain representative of both Hg and Xe variants - there are no significant differences in product water quality between the two units. While the emission is more energetic and so the wavelength can cleave higher energy bonds, the technology has been implemented so that product water specifications and system performance remain the same for both mercury and xenon variants. The major benefits of the Xe system are increased consumable life and elimination of mercury.

Why does the UV bulb cost so much?

As with any new technology, introducing a market-leading UV bulb comes with associated costs. However, when considering the extended operational lifetime of 5 years, the total cost of ownership of the new Hg-free model is very competitive in the market. The extended lifetime also aligns with sustainable practices by reducing replacement frequency and waste.

New Chorus Questions

Are there any other new features to the PURELAB Chorus?

While the PURELAB Chorus continues to offer the high-quality performance and reliability ELGA customers have come to expect, there are no additional new features to announce at this time. ELGA's focus has been on refining and optimizing existing sustainability criteria to ensure the system consistently meets the evolving needs of their users. Further, though other new features have not been added, Profile Dispense is an associated Dispenser feature that not many users are aware of - Profile Dispense is a memory-dispense function that allows users to record a sequence of dispensing that is specifically useful for their workflow - for example, the sequential filling of multiple volumetric flasks with bulk, then drip by drip flow. This allows users to save valuable time and ultrapure water in the routine tasks in the laboratory.

Is the PURELAB Chorus manufactured from reclaimed material?

Currently, the PURELAB Chorus is not manufactured from reclaimed materials.

Can users still get spare parts and consumables for the mercury based PURELAB Chorus 1 products?

ELGA are pleased to confirm that no parts have been discontinued with the introduction of the new Xenon-based PURELAB Chorus.

What connectivity is available with the Chorus 1?

The software in the new Chorus 1 variants, as in the rest of the PURELAB range, is compatible with the Veolia Hubgrade modem. ELGA will communicate to our Partners and Sales Channels when the Veolia Hubgrade modem becomes available from the Digital BU. The software is also LIMS compatible - if a customer is able to define their LIMS requirements, ELGA can determine whether the unit can be connected to their LIMS.

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