Bioquell[®] Hydrogen Peroxide Vapour Bio-decontamination

Products & services range



About **Ecolab**

A trusted partner at nearly three million customer locations, Ecolab is the global leader in water, hygiene and infection prevention solutions and services. With annual sales of €12 billion and more than 50,000 associates, Ecolab delivers comprehensive solutions, data-driven insights and personalised service to advance food safety, maintain clean and safe environments, optimise water and energy use, and improve operational efficiencies and sustainability for customers in the food, healthcare, hospitality, life sciences and industrial markets in more than 170 countries around the world.

Our assurance

Ecolab is committed to providing exceptional service, total plant solutions and unsurpassed industry expertise to help you achieve your business goals.

Our breadth of resources and integrated business model ensure consistency across your operations. A unique range of advanced hydrogen peroxide vapour bio-decontamination equipment and solutions

Bio-decontamination products & services

- Isolators with integrated bio-decontamination
- Mobile room bio-decontamination options
- Fixed bio-decontamination systems

QUBE

- Integrated solutions for pass-through chambers and process equipment
- Rapid Bio Decontamination Service (RBDS)

Bioquell[®] Hydrogen **Peroxide Vapour**

Bioquell's proprietary technology uses a 35% hydrogen peroxide aqueous solution to kill microorganisms. Whether for bio-decontaminating equipment or rooms, a single cycle using Bioquell Hydrogen Peroxide Vapour provides a 6-log bioburden reduction on exposed surfaces.

All Ecolab Bioquell systems operate with a BPR approval* and you can run them at ambient room temperature and relative humidity, without the need to attain significantly reduced humidity that can be associated with other hydrogen peroxide bio-decontamination systems.



ProteQ

Bioquell IG-2

Isolator with integrated bio-decontamination

Bioquell[°] **Qube**



The ideal isolator with integrated bio-decontamination

- Light, flexible, modular aseptic isolator in convenient configurations
- ISO 5 / Grade A working environment with rapid air clean up and integrated hydrogen peroxide vapour 6-log sporicidal kill bio-decontamination
- Optional 21 CFR Part 11 audit trail compliance package available
- Validated bio-decontamination cycles using Bioquell Hydrogen Peroxide Vapour



The Bioquell Qube has built-in hydrogen peroxide vapour bio-decontamination technology making it an ideal solution for aseptic processing. With multiple configurations available and a range of options and accessories, the Bioquell Qube is suitable for applications such as:

- Cell and Gene Therapy
- Sterility testing
- Cytotoxics preparation
- Small batch production (clinical trials, R&D, etc.)





Room Zone bio-decontamination

Bioquell[°] **ProteQ**

GMP <400m³ BMS 6^{-LOG} SPORICIDAL

Mobile bio-decontamination system for rooms and zones

- Advanced distribution and aeration capabilities with wireless communication provide faster setup and cycle times
- Optional 21 CFR Part 11 audit trail compliance package
- Hosts all components within its frame, including additional optional aeration units
- Control a network of three systems with one optional master control panel



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Bioquell[®] **BQ-50**



A portable bio-decontamination system for hospital-wide use

- Mobile, simple to operate, rapid bio-decontamination cycles with intelligent parametric control
- Offers cost-effective bio-decontamination of rooms and laboratories in non-regulated areas
- Bioquell BQ-50 suite includes separate high capacity aeration units

Enclosure Zone bio-decontamination

Bioquell[°] L-4



Bio-decontamination for enclosures, equipment and more

- Multipurpose mobile generator offers flexibility of use
- Suitable for isolators, enclosures, pass-through chambers, freeze dryers, incubators and rooms
- Easy 'no touch' bottle loading
- Optional 21 CFR Part 11 audit trail compliance package





Bioquell[®] IG-2



Seamlessly engineered and integrated option for hydrogen peroxide vapour bio-decontamination

- Designed to be built-in to process equipment and isolators for a seamless user experience
- Quickly bio-decontaminate equipment such as lyophiliser, filling lines, isolators, incubators, and more
- Rapid bioburden reduction for pass-throughs and airlocks
- Custom and challenging integration applications with the coordination and guidance of Bioquell engineers

Pass-through & airlock bio-decontamination

Bioquell[°] SeQure



A dedicated, wall-mounted bio-decontamination system

- Fixed hydrogen peroxide vapour generator for chambers or rooms
- ▼ Fast to install and validate (<1 week)
- Validated bio-decontamination cycles with optional additional aeration if needed



- Bottle module with peroxide traceability and wastage minimisation through the two-bottle module system
- Optional 21 CFR Part 11 audit trail compliance package available

Hydrogen peroxide biological indicators & chemical indicators

Bioquell[®] Hydrogen Peroxide Vapour



Bioquell[®] Biological Indicators

- 18 month shelf-life; traceable
- BPR approved







- Consistent, reliable and independently tested
- 6-log Geobacillus stearothermophilus biological indicators
- Developed to validate hydrogen peroxide vapour technology

Bioquell[®] Chemical Indicators

 Two specially formulated options for rooms and for isolators / small enclosures that help quickly verify a cycle has achieved an expected 6-log sporicidal kill



Bioquell[®] Rapid **Bio Decontamination** Service

Bioquell[®] **RBDS**



A fully managed Rapid Bio Decontamination Service

- Planned, proactive or rapid emergency deployment based on client operations
- Dedicated response options to host Bioguell equipment onsite in critical areas for rapid emergency deployment
- Single room/lab to whole facility bio-decontamination to fit client requirements
- Bio-decontamination of biological safety cabinets, incubators, robotic enclosures and other similar laboratory based equipment
- 6-log sporicidal kill on all exposed surfaces
- Fully managed process, from site survey through to final bio-decontamination report, with no capital equipment expenditure required



Applications:

- Bioprocessing, biomanufacturing and production zones
- Biosafety labs of all levels
- Cleanrooms and research labs
- Post-construction new-area commissioning
- Shutdown, end of campaign and facility restart periods
- Emergency response
- Dedicated response plans
- Equipment bio-decontamination needs (BSC, lyophiliser and more)



Ecolab[®] services

Installation & commissioning

To get the most from your Bioquell Hydrogen Peroxide Vapour bio-decontamination equipment, it must be correctly installed and configured. Depending on your application, this may not be a straightforward process, and our highly trained engineers are able to take you from a new, boxed unit to a fully functional and compliant set-up, ready for you to use, regardless of the complexity of your system.

Maintenance & calibration

Bioquell's experienced field service engineers can check, change and calibrate your bio-decontamination equipment, ensuring it remains in excellent condition. Whether it is breakdown cover for business / process critical systems or annual service and maintenance plans, the Ecolab team is able to tailor a service to suit you.





Equipment

GMP

Installation and operational qualification (IQ/OQ), Gas Cycle Development (GCD) and Performance Qualification (PQ) to ensure equipment is operational



Material compatibility testing

Ecolab offers a testing service to determine the compatibility of materials and components with Ecolab's Bioquell bio-decontamination systems. We also offer a hydrogen peroxide ingress testing service for clients who are concerned about hydrogen peroxide permeating into sensitive materials such as bags, vials, and syringes being loaded into isolators and material airlocks.

Training & support

To ensure longevity and efficient operation of your system, it is essential to start with a solid knowledge base. Using a combination of practical exercises, face-to-face training and a comprehensive e-learning system, we are able to 'transfer knowledge' through the medium which suits you. And once the training has been completed, our technical support team will continue to help you with any questions.

Professional validation of Ecolab's Bioquell Hydrogen Peroxide Vapour process within client environment including provision of regulatory compliant paperwork

within required timelines

- Rapid and efficient hydrogen peroxide vapour cycle development to fit client process to provide a robust bio-decontamination cycle which achieves 6-log sporicidal kill in the shortest amount of time
- We provide you with documentation to satisfy your regulatory requirements, from airflow checks and particle counts to full biodecontamination cycle development

Automated bio-decontamination using Bioquell Hydrogen Peroxide Vapour technology







Create efficiencies in your process

Repeatable, validated results

Offers regulatory compliance and audit readiness

For expert implementation of automated bio-decontamination measures in your facility contact your Ecolab Account Manager or visit www.bioquell.com

For regional office details, please visit bioquell.com

USE BIOQUELL PRODUCTS SAFELY. ALWAYS READ THE LABEL AND PRODUCT INFORMATION BEFORE USE.

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