



The presence of pathogens or other microorganisms can compromise the safety and quality of products and environments in many industries. There are unlimited applications requiring surface sterilization.



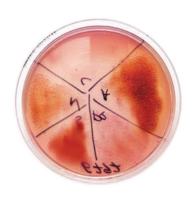
## PHARMACEUTICAL MANUFACTURING

Ensuring development and production of injectable drugs and active ingredients (API) in aseptic conditions, eliminating cross-contamination possibility and conducting sterility tests in aseptic environments are few examples of the unavoidable needs of pharmaceutical manufacturing market.



## RESEARCH AND LABORATORY

Biological safety is crucial to all research processes to avoid any contamination risk.



#### **BIOTECHNOLOGY**

Strict aseptic processing, environmental control and monitoring are key elements to the development and the success of new vaccines, products and applications in biotechnology.



#### **HEALTHCARE**

To keep patients safe, it is pivotal to prevent, reduce and contain infection risks in immunocompromised areas - such as operating theatres, critical care units, intensive care areas, as well as in hospital pharmacy and compounding.



In environments sensitive to microbiological contamination, it is mandatory to keep the sterility conditions to guarantee the efficiency, quality and safety parameters required by law and business objectives.



#### H<sub>2</sub>O<sub>2</sub> V-PHASE BIODECONTAMINATION

Using vapor-phase hydrogen peroxide  $(H_2O_2 \text{ V-Phase})$  as a cold sterilizing agent allows to achieve high levels of sterilization quickly, safely and effectively. The biodecontamination processes, repeatable and reproducible over time, are officially validated through the use of:

- Chemical Indicators (CI) to verify the correct vapor distribution
- Biological Indicators (BI) loaded with spores of Geobacillus stearothermophilus to demonstrate the actual sterilization.

### HYDROGEN PEROXIDE: VAPOR-PHASE ADVANTAGES

**Proved efficacy**: tested to kill a wide range of microorganisms and viruses,  $H_2O_2$  in vapor-phase allows a uniform distribution to reach also the most difficult areas of the environment. It is capable of a 6 Log reduction on all exposed surfaces.

**Excellent compatibility**: hydrogen peroxide has chemical-physical characteristics that are compatible with many materials such as metals, plastics, elastomers and all electronic devices.

**Unbeatable speed**: the low working temperature and the efficacy of the vaporphase  $H_2O_2$  allow a cycle time that is attractive to a wide range of applications and offer a rapid recovery of the production activity.

**Safe to use**: at the end of each biodecontamination cycle,  $H_2O_2$  is removed in the most effective way according to the application. Decomposing into water and oxygen, it is not dangerous for the operator and it is safe for the environment.

**No residue**: in vapor-phase it leaves no residue on the surfaces and no post cycle cleaning is necessary.

Vapor-Phase Hydrogen Peroxide mentioned by Food & Drug Administration (FDA), Environmental Protection Agency (EPA), United States Pharmacopeia (USP) and other regulatory agencies around the world as a surface sterilization agent.









Bioreset Plus

# BIORESET FAMILY

A wide range of innovative and versatile equipment, solutions and services, all designed to meet the needs of multiple industries and applications.





Turboflow







#### RAPID, EFFECTIVE, INCOMPARABLE.

Bioreset is the most technologically advanced, effective, rapid  $H_2O_2$  biodecontamination system. It works exclusively with hydrogen peroxide, requires little maintenance and no pre-conditioning of the environment. All this makes Bioreset extensively used worldwide to remove airborne and surface microbiological contamination in controlled or classified environments.



#### **BIORESET ADVANTAGES: SPEED, FLEXIBILITY, EFFICACY, SAFETY.**

- 6 Log reduction on exposed surfaces
- Vapor-phase H<sub>2</sub>O<sub>2</sub> ensures:
- excellent compatibility with most materials
- no residue
- Rapid, effective and repeatable cycles
- · Simplified interaction thanks to user friendly and graphically innovative software
- Environment pre-conditioning not required
- Fast restoration of operating conditions
- · Little maintenance activities required
- High flexibility to meet specific customer needs
- Maximum safety for the operator and the environment
- Worldwide distributor network for pre-sales consultancy and after-sales assistance.

