# **Activ-Ox**®

The Simple, Safe and Cost effective way to harness the power of Chlorine Dioxide





# **Activ-Ox**®

Ensuring Safety and Compliance of Water Systems During the COVID -19 Pandemic



#### What is Activ-Ox?

Accepta's patented Activ-Ox® chemistry and generation process is simpler, safer and more effective than other methods of producing chlorine dioxide and provides an excellent means for water hygiene control in a wide range of water systems including domestic systems, the hospitality sector and highly critical systems such as healthcare premises.

Chlorine dioxide is universally recognised as an excellent biocide and disinfectant for a wide range of applications because of its unique combination of properties. However, the traditional chemicals and generator systems used to produce chlorine dioxide can be complex, expensive and difficult to control. Activ-Ox®, by contrast, uses our unique chemistry and advanced dosage systems to provide the simplest, safest and most cost-effective means of enjoying the benefits of chlorine dioxide.

This can be best demonstrated in action with a video comparing the instant reaction between Activ-Ox pre-cursors and the slower reaction of conventional chemistries

Click the picture to the right to open the video or visit:

https://youtu.be/F7dJv du0cE



### **The Study**

As the UK emerged from the first lockdown and businesses started to reopen, the challenge of maintaining good microbiological control, during this Lockdown period became apparent.

To study this, our technical team carried out comparative data analysis to evaluate the impact of chlorine dioxide on controlling Legionella proliferation in water systems during Lockdown. The case study was carried out on hotels with similar water systems where the presence or absence of Activ-Ox treatment is the main variable.

In one UK hotel chain, Activ-Ox is used to control the growth of Legionella bacteria in some of its water services. During the first COVID lockdown, the water systems were subjected to routine outlet flushing to maintain Legionella control.

In systems that are treated with Activ-Ox ClO2, levels of Legionella bacteria remain significantly lower than in the hotels where Activ-Ox is not in use.

The data is presented in the table to the right.

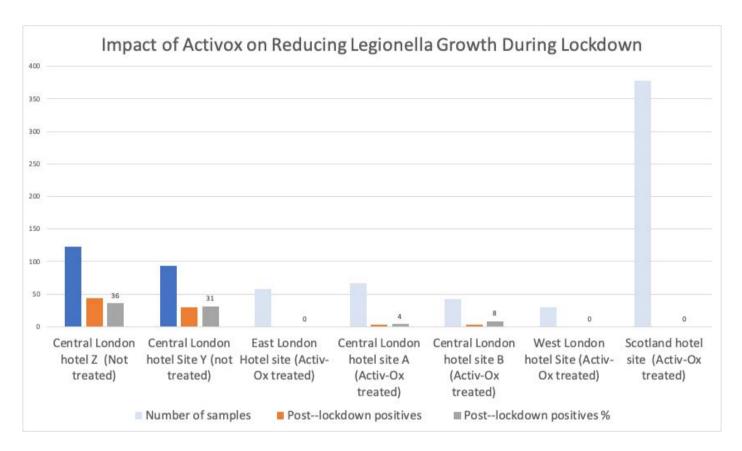
Hotel	Number of samples in 2020**	Pre-Lockdown positives 2020	Post-lockdown positives sampled after 23/3/2020
Central London Hotel Z (Not treated)	123	0%	36%*
Central London Hotel Y (not treated)	94	0%	31%
East London Hotel (Activ-Ox treated)	58	0%	0%
Central London Hotel A (Activ-Ox treated)	66	0%	4%
Central London Hotel B (Activ-Ox treated)	42	0%	8% (two samples only)
West London hotel (Activ-Ox treated)	30	0%	0%
Scotland hotel (Activ-Ox treated)	378	0%	0%

Table 1: Legionella colonisation with and without Activ-Ox

The two hotels in this case study **that were not treated** with Activ-Ox showed significantly higher colonisation with Legionella compared to hotels that used Activ-Ox as a control measure.

Maintaining acceptable microbiological control became more challenging in water systems during the COVID-19 lockdown. Lower occupancy levels and associated drop in water usage meant that pathogenic bacteria such as Legionella became more difficult to control. Additional interventions such as dosing with chlorine dioxide were needed to maintain safety and compliance in these systems.

Dosing Activ-Ox into the distribution network controls Legionella growth and thus dramatically reduces post lockdown colonisation.



To find out more and see our Activ-Ox System demonstration videos visit: https://Accepta.com/chlorine-dioxide

## **Simplicity & Controllability**

- Instant, high yield reaction
- Simple installation
- Easy to set up and adjust
- Automatic operation
- Simple test kit available

<sup>\*</sup>Colonisation was reduced to 8% after persistent flushing.

<sup>\*\*</sup> All analysis was carried out in Accepta's UKAS accredited laboratory.