



## Technical Brief

Big Red recognises the significant deficiencies with traditional disinfectants and conventional application methods and thus, the remaining risks of infection. Big Red have successfully mitigated both risks associated with inadequate chemicals and inefficient application by using a new generation product called BRStrike.

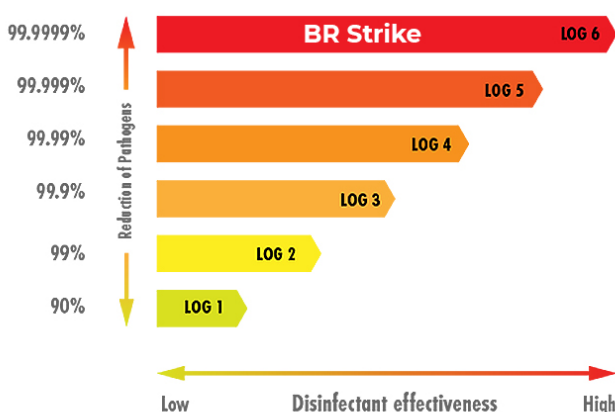
### Cold Plasma Arc Technology

BRStrike technology takes an already well-known tried and tested disinfection agent called Hydrogen Peroxide and then increases its microbial kill rate several times by ionizing it using a cold plasma arc. This effectively creates a disinfectant agent "on steroids" that is capable of a 6 log kill rate. This is actually so effective that many would refer to it as a 'sterilisation' process rather than just 'disinfection'.

### 6 Log Kill

In order to eradicate the COVID-19 virus from each and every surface where it might be present a far more radical approach is required, an approach that can consistently deliver a 99.9999% or Six Log Kill Rate. BRStrike delivers exactly this outcome, rendering treated surfaces not just 'not just 'disinfected', but can actually be described as 'sterile'. This total eradication and elimination of the COVID-19 virus therefore renders each and every treated surface completely safe and totally free of all pathogenic organisms including COVID-19.

### What does "Log Kills" mean?



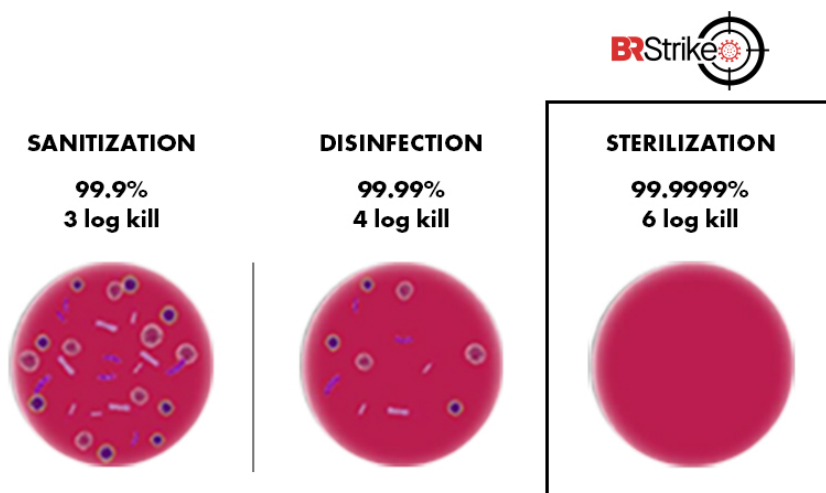
This is how this new innovative process works; a liquid solution of hydrogen peroxide ( $H_2O_2$ ) is nebulised into a very fine aerosol mist which is then passed under pressure through a cold plasma arc. The plasma arc (also described as a Binary Ionisation Technology) endows the very fine aerosol droplets of Hydrogen Peroxide with an added ionic charge. This effectively 'supercharges' an already effective disinfectant into a highly potent sterilization agent with a proven and unparalleled 6 log kill rate.

The reason that the ionic charge makes the aerosol droplets of Hydrogen Peroxide so effective is that the ionic charge, it now enables the droplets to be physically and magnetically attracted to the actual surfaces of the

virus itself. This effectively 'supercharges' an already effective disinfectant into a highly potent sterilization agent with a proven and unparalleled 99.9999% kill rate. This provides the Hydrogen Peroxide with an added 'Hunter Killer' characteristic that multiplies its efficacy several fold.

Dr. Martin Blake, Big Red's resident Technical Advisor, described this innovation in the following way "BRStrike takes a disinfectant that is already highly effective, and then places it on steroids". He added, "Its efficacy is so profound and its speed of application so quick and easy that it now makes traditional formaldehyde, vaporized hydrogen peroxide, glutaraldehyde, & titanium dioxide treatments obsolete."

## The BR Strike Disinfection Efficacy "6 Log Kill"



## EPA Registered

Binary Ionization Technology® was developed in conjunction with the Defense Advanced Research Projects Agency (DARPA) in response to anthrax attacks post 9/11/2001. It was also the first EPA Registered solution and equipment combination providing the unique technology of hydrogen peroxide ionization for disinfection purposes ([EPA Registration no. 90150-2](#)) and by virtue of its unrivalled efficacy in dealing with resilient pathogens, it also qualifies for inclusion on 'List N', the EPA's register of advanced for disinfection use Against SARS-CoV-2 product with a proven ability to consistently and effectively destroy dangerous pathogenic organisms. It is also listed in the [list](#) of Active Ingredients for Disinfection of the COVID-19 Virus.

Big Red is registered and licensed to carry out COVID-19 disinfection works.

## Safe for the Environments – Deadly to Pathogens and Viruses

Furthermore, BRStrike has a very rapid 5 second application time yet covers every conceivable nook and cranny of the area being treated, eliminates infection risks, is non corrosive and bleach free and is safe for electronic equipment. After treatment, it leaves no residues as all the ionized droplets convert to oxygen and water vapor.



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