

Advanced VITA – The ULTIMATE 4-in-1 Sanitiser for our FIRST RESPONDERS

How many times have we been asked over the last 4 months as to why a recognised fire company developed a health care program? The answer is always the same and very simple. We are fighting a hazmat incident of the highest calibre and the most widely distributed one at that. We owe it to our First Responders to ensure that we, as the Advanced Group of Companies, do whatever needs to be done to keep them safe from contracting this virus every time that they respond to an incident.

With the corona virus (CV) pandemic sweeping through the world (a world-wide Hazmat incident of note), effective sanitation has become critical and even lifesaving, especially for our First Responders. Our eyes, mouth and nose have proved to be primary entry and infection points for this virus. Scientists and the WHO have discovered lately that an alarmingly large proportion of the CV infections are also caused by minute micron size droplets that have been aerosolized by infected persons either sneezing, coughing or merely exhaling the virus into the air where these floating viruses have been measured to remain afloat for excessive periods of time, greatly enhancing the vulnerability to infection of our First Responders.

So, a First Responder can become infected simply by the airborne virus by merely working in a hospital or walking and breathing in a contaminated environment, in a shop or shopping mall or while operating at an incident, without having touched anything and without having “consciously” touched his/her own face. Washing and sanitizing one’s hands only is obviously no longer enough to reduce the risk of infection by the CV. We all know that the CV infection can **only** enter and infect the body via the eyes, mouth, or nasal passage, also known as the Points of Infection. After entering the body, the virus spreads to the back of the nasal passage and to mucous membranes in the throat, attaching to the body’s cell receptors. The viral particles hook onto the outer walls of the host’s cells, the virus’s genetic material breaches the cell membrane, and it then hijacks the cell into making more copies of the virus. The virus copies proliferate, break out of the cell, and infect other cells in the body. A single cell can churn out millions of copies of the virus before it dies. The virus then moves from the back of the throat down the bronchial tubes toward the lungs.

It is obviously clear that we **MUST** keep the face and infection points well sanitised and clear of the virus. To improve our own biosecurity and to reduce the risk of infection, we **MUST** keep our faces and these Points of Infection (eye’s, mouth, and nasal passage) as well as throat sanitised and free of the virus. It is critically clear that we **MUST KILL THE VIRUS** in these infection points before it migrates down to the lungs. If we can keep these infection points sanitised and free of the virus – then obviously we greatly reduce the risk of infection. This is critically important, especially for First Responders who are bravely battling this virus and who are at greatest risk.

A sanitiser with a content of 70% alcohol is fine for sanitising hands, but it cannot be used, like most other toxic chemical sanitisers to sanitise one's face, nose, mouth, and eyes. A sanitiser is required which efficiently and effectively destroys the full spectrum (all) of pathogens (including the CV), is non-toxic and safe to spray onto one's face and eyes, into one's nasal passage and into one's mouth to keep all the primary infection points free of contamination and free of the virus to reduce the risk of infection. During these times of fear and uncertainty the world needs a sanitiser which can be trusted to sanitise ourselves, our family, our homes, car and our working environment and which is of course affordable and cost effective.

This is what makes Advanced **VITA** so unique in its application, the only **4-in-1** sanitiser on the market. It is the only sanitiser which effectively and efficiently kills all pathogens (including CV) and is 100% safe for use on the FACE and can be used to safely spray into the nasal passage and into one's mouth and throat. **VITA** will keep the face and all the infection points; the eyes, mouth, and nasal passage as well hands sanitised and virus free. No other sanitiser can be used to sanitise the face and the infection points.

VITA is made up of stabilized Hypochlorous (HOCl) - a unique and natural sanitation solution that is highly effective, providing rapid kill against the full spectrum of microbes, including all drug resistant bacteria and bacterial spores, fungi, yeasts, moulds, viruses, even prions as well as the tough *Clostridium*. **VITA** is also highly effective in killing, and the removal, of biofilms which is a major source of re-contamination in many industries and applications such as medical equipment and a major source of recontamination in purulent wounds and in pneumonia in the lungs.

VITA's use as a sanitiser is supported by a huge body of scientific and medical evidence from around the globe (in order to receive copies these studies and tests, please mail trevor@advancedhcs.africa). Top scientists are publicly saying that this product is the new "**gold standard**" for infection control.

Despite the high kill efficacy on harmful pathogens, **VITA** remains 100% safe and completely harmless to animal and human tissue, unlike most chemical disinfectants on the market today as well as hand sanitisers containing 70% alcohol. Due to its biocompatibility and mutagenic nature, **VITA** has no adverse effects on fibroblasts and keratinocytes. It is free of any oral or nasal toxicities, skin sensitizations or irritations and offers anti-inflammatory and immunomodulatory properties.

VITA is made up of stabilized pH neutral Hypochlorous Acid (HOCl), one of the most natural and effective biocides known to man. Hypochlorous acid oxidises (explodes) the cell wall of all pathogens, causing necrosis (rupturing of the cell) or apoptosis (programmed cell death) and thus eliminates them. Although viruses are not technically living organisms, they too are destroyed by Hypochlorous acid. **VITA** also has surfactant and electrical properties which reduces the surface tension of the outer protective layer of the virus and like a detergent destroys it to expose the virus which cannot survive outside the human body without its protective outer layer.

Despite Hypochlorous acid's destructive potential, our bodies use it as a defence mechanism throughout life. Hypochlorous acid is naturally produced by our white blood cells and is an essential part of our immune system. When an invading pathogen or infection threatens a human cell, the body's immune system responds by destroying the pathogen before any harm can be caused to the cell. This process is called phagocytosis and is one of humans' most symbiotic actions – eliminating pathogens while remaining inherently harmless, unlike most other chemical disinfectants such as alcohol which are toxic to human tissue and cells.

VITA is the FIRST and currently the only sanitiser on the market that can be used to effectively sanitise and eliminate the virus on the face and in the critical Points of Infection, i.e. the mouth, throat and nasal passage, where the corona virus enters the body and begins its destructive infection process. It is cost effective and can be manufactured quickly in huge quantities to provide an affordable all-round highly effective **4-in-1** sanitiser for the personal protection of our First Responders. Because it is so effective against **ALL** pathogens and because it is so safe and there is no risk to humans and small children, it is ideally suited for use in fire stations, clinics, hospitals and emergency vehicles as a general air and surface disinfectant and sanitiser. It is used as in a growing number of hospitals in the USA and around the world.

The main advantages of VITA

1. **VITA** is the most effective, the safest and the most cost-effective sanitiser on the market.
2. Speed and efficacy of kill against the **full spectrum** of pathogens, including MDR pathogens, bacterial spores and prions as well as also rapidly killing the highly contagious CV.
3. Because of **VITA's** mechanism of kill, scientists say that pathogens will not build a resistance to **VITA**.
4. **VITA** is highly effective in killing and removing biofilm. There are many scientific studies and publications available to show how Biofilm is HIGHLY problematic in many medical applications and conditions such as in purulent wounds and also in many medical applications such as medical devices as well as in many industries (including hospitals, medicine, pharmaceutical, dentistry, food processing plants and water treatment) as a major source of pathogenic recontamination. It is a massive problem that is grossly underestimated. So, it is important to appreciate the enormous damage and cost of biofilm. Some economists estimate that biofilm costs an economy as much as 2% of its GDP. Importantly, the majority of sanitisers do not provide for a full kill and cannot remove biofilm and as a result are largely ineffective against biofilm.
5. **VITA** has a superior safety level, with no adverse effects on fibroblasts and keratinocytes, is free of any oral or nasal toxicities, skin sensitizations or irritations and offers anti-inflammatory and immunomodulatory properties. It is 100% safe. No risk of poisoning or causing necrosis (damage) of human cells and tissue. It is a highly effective biocide and sanitiser and yet it is so gentle to human and human tissue and cells.

6. **VITA** can be applied in situ in any working environment (e.g. hospital wards, fire stations, etc.) without having to vacate the premises for risk of poisoning – as is the case with most chemical sanitisers. **VITA** can be sprayed in a work area without the staff having to vacate the building.
7. **VITA** leaves no chemical residue and there is no need to rinse with water after application.
8. **VITA** is not a risk to the environment and dissipates in high organic soil loading and reverts to H₂O and NaCl.
9. **VITA** can be safely applied as a spray in emergency decontamination programs or as a spray in emergency decontamination spray booths and used to spray and decontaminate the primary infection points on patients, i.e. spray onto their faces and into the nasal passage and into their mouths.
10. **VITA** can be safely and effectively applied by means of a mist or fog or by humidifier to decontaminate the air and all the surfaces in a room. Because of its electrostatic nature, the **VITA** droplets will be far reaching and penetrate cracks and hard to reach places and provide for an overall and full surface decontamination.
11. Importantly, **VITA** can be applied into ventilation and air conditioning systems (e.g. hospitals, fire stations, office blocks, etc.) to provide for the decontamination of circulated air to kill airborne pathogens as well as viruses and to prevent aerial cross contamination.

To receive additional information on this ULTIMATE 4-in-1 Sanitiser, please visit www.advancedhcs.africa or contact Trevor Fiford on +27 82 651 2580 or email at trevor@advancedhcs.africa.

Advanced VITA.....because we care!