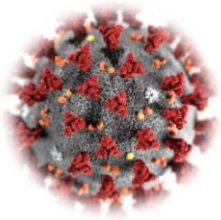
The use of Loxyde against the corona virus – COVID 19



Introduction:

With about half or more of the world population in lockdown due to the current Corona virus pandemic disinfection is currently a hot item as people seek to protect themselves and their loved ones. We unfortunately don't know when this pandemic is going to end, especially as it now appears that you can get Corona multiple times so that the idea of building up population resistance as initially aimed for by some countries is not going to work. That will probably mean finding a vaccine even harder.

To keep ourselves as safe as possible it is important to maintain a high hygiene protocol such as hands washing and disinfection. But it is important to use the right disinfectant. The corona virus enters the body via mouth, eyes, nose, ears so only washing and disinfecting hands is in my view insufficient. Personally when I go out I take a spray bottle of 2.99% Loxyde and spray my hands, arms, face as well as clothing to add an extra barrier against possible corona infection. I will repeat this every 45 minutes to 1 hour if my outside journey last longer than that time and will again repeat it before entering my house even though I will immediately shower and wash all clothing worn outside.

Disinfection is here to stay and using the right disinfectant is important. I have had conversations with numerous people from doctors to other disinfectant specialist and we all agree that we have to increase our awareness personal hygiene, of disinfection and also the frequency its used. The reason behind this is simply because whilst we are currently fighting COVID-19, the next major virus is just around the corner….

Don't believe me… here are some facts:

- Spanish flu (influenza virus): 1918 – worldwide pandemic
- Ebola virus: 1974, 2007, 2014, 2018-2020 – so far limited to the African continent.
- Swine flu pandemic in Mexico (influenza virus): 2009 – This pandemic was fortunately quickly contained by the Mexican government with help from the US CDC
- SARS (CoV-1) (Corona virus): 2002-2004
- SARS (COV-19) (Corona virus): 2019/20

We are constantly under attacks by viruses – in fact there has never been a time in our history that humans weren't under attack by a virus. The difference is that it now seems to be getting more frequent. This is not by chance, viruses want to procreate and to do that they need a host. It helps if there are a lot of those hosts around and with 7.8 billion people living on this planet as of March 2020 we certainly are a very attractive target for viruses!

Disinfection

Worldwide authorities recommend the use of hand-washing and or the use of alcohol gel. I have no problem with this when used in combination: ie hand-washing followed by alcohol gel. The other reason why I like alcohol is that it's one of the few disinfectants that micro-organisms can't get resistant to and it is environment friendly.

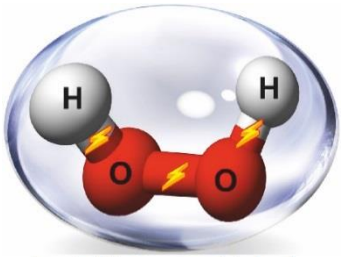
I do have a problem when only alcohol gel is used. The reason for this is very simple:

- Alcohol gel does not last long enough… it's pretty much all evaporated in 20 seconds and gives a false security in many cases.

- Alcohol gel if far less effective on dirty or greasy hands.
    - For instance each time you apply alcohol gel to your hands you also apply gel. This forms a layer on your skin under which micro-organisms can develop safely from the next alcohol gel application. Or you may naturally have a greasy hand, sweaty hand or simply dirty hands due to previous handlings. So it is important to wash your hands in between alcohol applications
- Not all alcohol gels meet the required norm of 80% or higher – especially now when alcohol is in short supply on the world market and is often watered-down due to cost saving or because it is difficult to obtain.
- To be properly effective and alcohol gel needs to contain a secondary disinfectant to back-up the alcohol. This is often not the case. The US FDA does not approve any alcohol based hand sanitiser based only on alcohol simply because it does not meet the requirements no matter what level the alcohol % is.
- Alcohol gel is limited for used on the hands. So what about other exposed areas?
- Alcohol gel has no residual effect which means recontamination is instant.
- Alcohol gel unfortunately really dries out your skin certainly after numerous applications.
- It's simply not the best disinfectant available.

What is Loxyde.

Loxyde is a stabilised and activated hydrogen peroxide. Through our special formulation we have managed to activate the hydrogen peroxide at the molecular level making it far more powerful than standard hydrogen peroxide. Then to insure it didn't just all react uncontrollably in the same way as standard hydrogen peroxide we also created a special stabiliser which ensures a very controlled reaction. This is why Loxyde achieves a far better disinfection and last much longer at a much lower dosage than standard hydrogen peroxide. Another major benefit is that micro-organisms can't become resist to hydrogen peroxide and therefore to Loxyde.



Loxyde: Micro-encapsulated and activated at the molecular level

So what can Loxyde do?

- Well first of all Loxyde won't dry out your hands which is an added benefit. As mentioned previously a 3% solution will certainly fully disinfect your hands in under 1 minute.
- It has a long lasting effect so instant reinfection of your hands will not occur. Loxyde will probably be effective on hands for 30 minutes to 1 hour depending on how much you sweat and on how dirty your hands are or become.
- Loxyde can be used as a hand sanitiser but can also be sprayed on arms, ears, face (close your eyes, mouth and hold your breath whilst spraying) to offer added protection against infection. On skin Loxyde will remain active for between 30 minutes to 1 hour. On clothing Loxyde can remain active for several hours.
- Loxyde doesn't have a problem with greasy hands or dirty hands as – unlike alcohol - Loxyde will easily cope with it.
- Hydrogen peroxide is recognised to be highly effective against Corona virus.

Stabilised and activated Hydrogen peroxide is active against a wide range of microorganisms, including bacteria, yeasts, fungi, viruses, and spores. A 0.5% stabilised and activated hydrogen peroxide demonstrated bactericidal and virucidal activity in 1 minute.

Dr. Andrew Alexis, MD, chair of Mount Sinai West's department of dermatology.:

"Hydrogen peroxide is very effective as a skin disinfectant".

Other uses for Loxyde against the Corona virus

Besides its use as an excellent hand, face, arms and clothes disinfectant when used at 3%, Loxyde can also be used for surface disinfection in a number of ways.

Loxyde is used as a none-rinse disinfectant. For this we use the standard Loxyde which contains 35% hydrogen peroxide and the dilute this down to the required solution. This means you apply it and leave it, there is no reason to rinse it as is the case with many other disinfectants. The advantage is that it will keep on disinfecting for many hours following application and will the break down into water and oxygen. All ingredients in Loxyde and environment friendly and all break down to water and oxygen.

It can be applied in numerous ways starting with the mop and bucket application. But far more efficient and quicker is:

- Spray – apply at 2-3%
- Fog – apply at 10-20%

Fogging a room with Loxyde will ensure a lasting disinfection and is fast. You can fog a room in a couple of minutes using a good fogger. I have measured peroxide residue for up to 48 hours on various surfaces and as long as there is a Loxyde presence it will guard against re-infection of a surface.

Conclusion

Eventually we will get through this pandemic, the human race is very resilient. But we have to be aware that the next virus mutation is around the corner and it could be worse than COVID-19 or milder, no idea and time will tell. But an important tool in this fight of survival will undoubtably be prevention. Prevention can have many aspects such as increasing hygiene regulations in food markets around the world. But to do this will require a huge educational campaign… you have to first explain why hygiene is important and make sure that people understand this. That's the hard bit to explain to people that something that cannot see, hear or smell can potentially cause huge health problems. Clean water is essential and if needed in combination with a proper disinfectant – and I don't mean chlorine…. Chlorine is not that good in continual use as micro-organisms rapidly become resistant to it… but also to kill viruses you need really high dosages of chlorine which is dangerous.

The world needs to have simplified approvals that do not costs a fortune. Companies producing or creating new disinfectants should not have to spend years going through an approval process, having to pay hundreds of thousands of dollars or euros or even multiple approval processes as is the case in some countries especially if these products are environment friendly, based on ingredients known to be safe. Generally a disinfectant is not allowed food contact so does not require the strict protocols pesticides or herbicides require. Manufacturers should be able to state their ingredients, and testing results made by an independent laboratory. If the disinfection level achieved meets the requirements and the ingredients are on the approved list of chemicals then the product should be allowed for use without having to undergo huge application fees and long lasting administrative red tape. That whole process needs to be done cheaply and take no longer than 4 weeks.

Because DISINFECTANTS are going to be important in the coming months and even years. They form a crucial part of our fight against the current infection as well as any future infection.

Mike de Jong
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For question or comments please contact me at: mike@loxyde.com