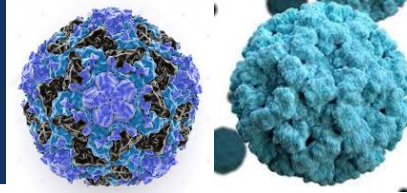


Norovirus and Rhinovirus control on inoculated surfaces.



Applications

Environmental Biosecurity in Indoor Public areas, Health Facilities, Work/Production Areas, etc.

Objective

Determine efficacy and efficiency of Oxyion Technology® to inactivate viruses, Norovirus (gastroenteritis), Rhinovirus (colds) and others on plastic, stainless steel and floor tile surfaces.

Materials And Methods



1. Cultivation of and Norovirus (ATCC VR-782) & Rhinovirus (ATCC VR-1121) to approximately 1.10⁷ UFC/ml concentration



2. Virus inoculation
100 ml with 10⁷ UFC on 5x5 cm² plastic- stainless steel- tile surfaces



3. Oxyion exposure
Time: 30 min y 1, 2, 4, 8, 12 y 24 h
24 °C y 40 % RH.

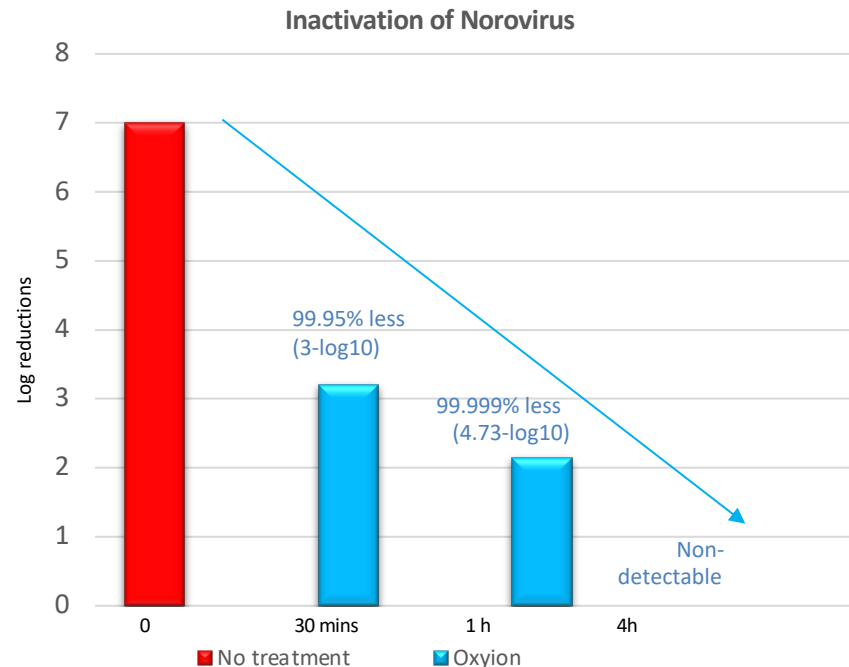


4. Analysis of Virus Counts
in plastic- stainless steel- tile



5. Results and Conclusions

Results



► Norovirus & Rhinovirus
99.95% reduction in
just 30 minutes.
Non-detectable in
less than 4 hours

1 Log reduction = Number of germs is 10 times smaller
2 Log reduction = Number of germs is 100 times smaller
3 Log reduction = Number of germs is 1000 times smaller
4 Log reduction = Number of germs is 10000 times smaller

Conclusions

The results showed a clear correlation between the Oxyion treatment on surfaces and effective viral inactivation of viruses like Norovirus and Rhinovirus on plastic, stainless steel and tile surfaces.

