The new normal:
Getting back to work safely and confidently

SHIELDme – FAQs  Moe Salman  SHIELDme work group 

The Science: *Hypochlorous acid is one of the most effective known biocides. This weak acid with the chemical name HOCl is the same chemical produced by the human immune system to kill invasive organisms and fight infection. We replicate the human immune system by producing Hypochlorous acid (HOCl) to combat viruses, bacteria and other microorganisms. We produce HOCl through an electro-dialysis (ED) process, using salt and water.*

FAQ	Answer
What is SHIELDme Disinfectant?	SHIELD*me* Disinfectant is an Electronically Activated Water containing Hypochlorous Acid (HOCl) as active ingredient, this formula was declared by FDA on 2002 as a high level disinfectant. SHIELD*me* is in compliant with British Standards & European Norms BSEN 14476, 14204, 1276, 13704, 13697 & 1656. SHIELD*me* Disinfectant is fast and effective against all know pathogens and effectively kills 99.999% of harmful germs, viruses and spores including influenzas, E-coli, C-difficle, MRSA and Norovirus in less than 30 seconds. 100% Natural, Non-Alcoholic, Non-Irritating and Benign to Human Skin. SHIELD*me* contains no preservatives, fragrances or essential oils. SHIELD*me* Disinfectant is produced from three everyday components: water, food grade salt, and electricity. SHIELDme Disinfectant is a stable packaged Hypochlorous acid (HOCl), a safe, environmentally friendly biocide which represents a monumental step forward in health care and hygiene.
Where is SHIELDme made?	SHIELD*me* Disinfectant is made and produced in the UK. SHIELDme brand is owned by SHIELD MEDICA Ltd. the professional medical solution company based in Basildon, Essex and supplying emergency equipment, mobile medical units & consumables. SHIELD MEDICA Ltd. is part of a larger group of companies, NAFFCO with its World Headquarter in Dubai, having more than 15,000 employees, serving over 100 countries and over 6 million square feet of manufacturing facilities. **"Passion to Protect"** is more than just a slogan, it's a way of life for NAFFCO and its subsidiaries.
Why haven't I seen this before?	Hypochlorous was discovered in the 19th century by a British scientist. It was actually manufactured for the first time in the 1960's. There was always a problem however in that no one was able to make a stable version that had a shelf life so it could be packaged. The only organisations that could take advantage of this incredible product were large scale industrial and agricultural operations such as dairy and poultry units, where they produced non-stable Hypochlorous onsite for immediate use. Our team and the scientists have worked out how to stabilise the active ingredient so we can now make it available to everyone.
Response regarding the effectiveness of SHIELDme against the SARS-CoV-2 virus and COVID-19.	SHIELD*me* Disinfectant has been independently tested against COVID-19 Virus in the US by Microbac laboratories, Inc. and successfully kills the Virus at a contact time of 30 seconds. SHIELD*me* has been independently tested by Eurofins ams Laboratories Pty Ltd in Australia to ASTM E 1053 using the methodology of EN 14476 (Quantitative suspension test for the evaluation of Virucidal activity in the medical area). This test is again a benchmark for effectiveness against Coronaviruses. Remember SHIELD*me* is alcohol free, skin friendly and much faster acting than conventional alcohol-based sanitizers. With this virus you need to kill it fast.
What is the pH of SHIELDme?	The pH of SHIELD*me* Disinfectant is neutral at pH7. This means it won't sting.
Is product will work effectively on fabric or people clothing?	As SHIELDme is mildly saline, be sure to wipe off any metal surfaces after spraying to prevent any possible corrosion. It is fine to allow to dry naturally on all other surfaces.
I am pregnant, is it safe?	Yes

Is it safe for kids?	Yes.
Is it safe for elderly people?	Yes. It is widely used for infection control with significant benefits in the aged care sector.
What if it gets in my eyes?	Generally safe, the spray is odorless and non-toxic. It will not act as an irritant. The sensitivity studies confirm there is no adverse impact on the eye. If ill effects occur flush eyes with plenty of water and seek medical attention.
What if I ingest the spray?	The mist is so fine this is unlikely, the toxicity studies show the LD50 to be about 3.5 litres, so even if you drank a whole bottle it would not be harmful. The spray is natural and not toxic, there would be no harm.
Is it safe for people with any health conditions?	Please consult physician.
Can I use this on my toddlers hands to clean when out?	Absolutely the product is perfect to use to clean your toddler's hands. It is safe and gentle on the skin but incredibly effective at eliminating harmful bacteria and viruses in seconds. The solution contains no alcohol, preservatives or fragrance and there's no need to rinse hands after using SHIELD*me* as a hand sanitiser as it contains no nasty chemicals.
Will it stain my clothes eg suede clothes and shoes?	No. Not with infrequent use
Will it make my clothes smell?	No. Clothes are best decontaminated using validated conventional washing techniques
What if I have a baby with me?	It is safe.
I have asthma. Is it safe?	It is non-sensitizing.
Is it animal safe?	Yes.
How green is the solution?	It is Eco friendly, it turns to saline. The active substance is identical to the molecule produced by the mammalian immune system. It is produced from natural ingredients.
How often do you need to be sprayed in one day?	As needed. For surface disinfection once a day is effective. For heavily used surfaces, eg after food preparation, spray and wipe after cleaning up.
If you are getting numerous 'doses' a day, what effects will this have?	Nothing, safe. It will help keep things clean
How long after first use does it expire?	The product has a shelf life of 12 months from point of manufacturer which is labelled on the bottle with the batch number. Usage of the product does not affect the expiry date.
Will this kill c diff & can I use it to spray the home & items in it?	SHIELD*me* Disinfectant has been laboratory tested against Clostridium difficile and is highly effective against this bacterium. SHIELD*me* is reliable product for use on both human skin as well as for use as a hard and soft surface disinfectant, so it is fine to spray you home and items in it. As SHIELD*me* is mildly saline, be sure to wipe off any metal surfaces after spraying to prevent any possible corrosion. It is fine to allow to dry naturally on all other surfaces.

Can this be used to clean new piercings?	SHIELD*me* Disinfectant is highly effective to use as a disinfectant for new piercings. You can spray the area liberally twice a day or more if needed.
Is this suitable for vegans please?	The ingredients are water, salt and Hypochlorous acid only. None of which have been derived from animals.
How does this spray interact with materials (even more important if it's used at bars or similar)? Would it damage leather, wool, and suede?	No damage, as SHIELDme Disinfectant is mildly saline, be sure to wipe off any metal surfaces after spraying to prevent any possible corrosion. It is fine to allow to dry naturally on all other surfaces. The best way to disinfect is to spray and wipe dry, this will deliver very effective hygiene and infection controls with no damage to the item being cleaned
How often would you have to apply this disinfectant in order to ensure that there are no viruses or bacteria on the surface? In other words, how long would the protection from bacteria, fungi and viruses last?	As long as no contamination comes again in contact with the same surface. Studies have demonstrated that continual use of the product steadily reduce the "bounce back" rate of contamination. This leads to a reducing level of risk. Some other chemical/Alcoholic disinfectant manufacturers claim that they are effective for longer time, but the truth is that it is chemical compounds and the exposure to it, is much dangerous if they are available on the surface.
Is SHIELD*me* tunnel can be dangerous for people's health?	Not at all, if using SHIELD*me* Disinfectant the natural, organic & ECO friendly product will significantly reduce the risk of infection. SHIELD*me* Disinfectant is a: • 100% NATURAL HIGH-LEVEL DISINFECTANT • NATURALLY PRODUCED IN ALL HUMAN IMMUNE SYSTEM • KILLS 99.999% OF VIRUSES BACTERIA • SAFE FOR HUMAN & PETS • SAFE TO INHALE • NON-IRRITANT • ECO-FRIENDLY • NON-ALCOHOLIC • NON-TOXIC
Has the tunnel being proven to work well against COVID-19?	SHIELDme Disinfectant has been independently tested against COVID-19 Virus in the US by Microbac laboratories, Inc. and successfully kills the Virus at a contact time of 30 seconds. SHIELDme Disinfectant is proven to kill 99.9999% of Viruses, Bacteria and Germs, there is no current standard that we can apply on the Sanitizing Tunnels, however, using SHIELDme Disinfecting tunnel and following the official guidance on the government's plans for returning to the workplace will significantly reduce the risk of spreading the viruses.
Are public systems for disinfecting individuals such as spraying via tunnel or chambers safe to use?	SHIELDme Disinfectant with its active ingredient of HOCl is 100% safe to be used as being classified by ECHA as Product Type (PT) 1, PT2, PT3, PT4 and PT5, i.e. from Human Hygiene, Veterinary Hygiene, Food & Feeding area and drinking water. SHIELDme Disinfectant can be used as Human Antiseptic & Disinfectant, due to the fact that its pH balanced and HOCl is the biocide naturally produced in all human immune system, therefore it is completely benign to human skin tissue.

	SHIELDme Disinfectant Non-Toxic, contains NO alcohol, preservatives, fragrance OR essential oil. SHIELDme is a super disinfectant with the following features: • Kills 99.9999% of all harmful micro-organisms on contact. • Eliminate odours caused by bacteria. • pH neutral, Non-Irritating and Non-Sting. • Can be used for cleansing and disinfection of eyes and eye lids as well as in mouth area. (Do not ingest) For the above, using SHIELDme Disinfectant and Disinfecting Tunnel by spray or fogging HOCl to human body or cloth is safe & non-toxic and will significantly reduce the risk if the object's surface was transporting micro-organism. We do not claim that infected person whom contracting viruses will not spread the virus, however, following the government guidelines, the Authorities procedures and the Employer instructions by presenting proper PPE, disinfecting work place and maintaining the social distancing will significantly reduce the risk of spreading the viruses.
In one IBC (1,000 Litre) of SHIELDme Disinfectant; How many passes can be completed?	By assuming that the traveling distance is 2m Length, traveling time is 5 seconds, and it is set to automatic operation, then number of passes per 1000 Ltr shall be **8,333** Passes. The tunnel designed to have floating base with weight sensor that allow the spray to operate once the person step on the platform and switch off once the person step off. Mist density: Fine Mist spot 3-7 microns.
What is the Mixing Ratio?	DO NOT Dilute SHIELD*me* Disinfectant, it is ready to use.
By using the Fogger, will this affect the Fire Alarm in the building?	Do not apply the fog directly to smoke detectors. Typical application is to direct the fogger's nozzle 45 degree toward surfaces need to be disinfected and by taking into consideration that the disinfectant is a (99.5%) water having a considerably heavy weight droplet that naturally falls by gravity on surfaces, therefore fogging the disinfectant will not trigger the intelligent fire alarm system.

Key Features & Solutions:	
SHIELD*me* Disinfectant	• 100% NATURAL HIGH-LEVEL DISINFECTANT • NATURALLY PRODUCED IN ALL HUMAN IMMUNE SYSTEM • KILLS 99.999% OF VIRUSES BACTERIA • SAFE FOR HUMAN & PETS • SAFE TO INHALE • NON-IRRITANT • ECO-FRIENDLY • NON-ALCOHOLIC • NON-TOXIC
SHIELD*me* Tunnel	• MODULAR DESIGN. • AUTOMATIC ACTIVATION. • EASY INSTALLATION IN LESS THAN 30 MINUTES.

	• CUSTOMER BRANDING.
SHIELDme Fogger	• Highly efficient and convenient Disinfecting Fogger • Cover a wide area in a short amount of time, quickly and thoroughly disinfecting areas.

The new normal: Getting back to work safely and confidently

On 10 May 2020 the UK Government began to outline its plans to enable certain sectors in England to return back to work, while the devolved administrations in Scotland, Wales and Northern Ireland have started releasing their own plans for getting businesses up and running again.

While employees who can operate from home are advised to continue to do so, official guidance on the government's plans for returning to the workplace have continued to emerge, prompting businesses across all sectors to start to put in place "back to work" **guidance and policies**.

Whilst there is currently sector specific guidance across a number of industries, businesses in all sectors are beginning to scope out a "new normal".

For businesses, what does this mean?

Even last week, Foreign Secretary, Dominic Raab, has said social distancing measures are set to remain in place for "some time". For businesses this could mean the possibility of shift patterns, changing of factory floor layouts, longer retail queues to manage the flow of customers, use of PPE in the workplace, and restricted access to toilets.

The most significant practice that will enable reduction in spread and has been promoted since the very start of the pandemic is a continued focus on hygiene practices (washing hands frequently) and infection control management across all people, in all kinds of businesses and environments.

But what does good hygiene practice and infection control look like?

There has been a plethora of new brands and products entering the market since the start of the pandemic. Some of which just do not work, are not effective against COVID-19, are illegal, not suitable for the environments for which they are being promoted or that can be toxic to humans if not used correctly.

Hypochlorous acid (HOCL) is a little-known miracle. Our **SHIELDme** Disinfectant is proven to kill 99.9999% of viruses and bacteria and can be used on any surface, including on skin as a hand sanitiser. HOCL is also fast – very fast. Many typical disinfectants that are being touted online only start working on viruses and bacteria after 10 minutes of contact. Our Hypochlorous acid works in seconds – just what busy offices, factories, schools, care homes and hospitality venues need. And as it can be used as a liquid, spray or fogging mist the potential really is endless.

Infection control doesn't have to be as scary as it sounds. It just needs the right product, a consistent and robust regime and all staff to be on board.

The following reports presented by Dr. Masood Almughanni, Factory Operations Director – Head of Medical Department

Clinical study supporting evidence of safety on lungs:

‘inhalation effects hocl respiratory effects hocl’

Toxicity
Toxicity, flammability and compatibility of materials should be considered in selecting an appropriate disinfectant. For environmental decontamination applications within habitable spaces, clearly certain biocides are too toxic (e.g., phenolics and glutaraldehyde) or flammable (e.g., alcohols) or have the potential to leave unwanted residues on surfaces (e.g., iodophors). Hypochlorous is not flammable and not known to release harsh chemicals. Hypochlorous acid should not be mixed with ammoniabased products, as chloramines can be released.

EPA Approved Marketing Claims
The Environmental Protection Agency approved marketing claims in 2017 for a hypochlorous acid product with the following ingredients, water (99.813%), salt (0.17%), Hypochlorous acid (0.017%). It’s product to be gentle with no harsh vapors, safe for babies and pets, and suitable for medical applications.

1. Suitable (for use) as a (peroxide alternative)
2. Breaks Down to Saline Solution
3. (Breathe Easy:) (Fragrance Free) (No Harsh Fumes) (No Harsh Chemicals)
4. Leaves no harsh (chemical) residue
5. No harsh (chemical(s)) (residue) (left) (behind)
6. A (gentle) (mild) way to clean
7. No rinsing (necessary) (required)
8. For use in (newborn) nurseries
9. For use in neonatal nurseries
10. No harm after pet contact with product
11. Fragrance Free, won’t irritate your dog’s nose
12. No harsh fumes to irritate (pet) (dog) noses
13. (Gentle) (Mild) (enough) to use on any washable hard, non-porous surface

https://www.ncbi.nlm.nih.gov/pubmed/12637967

Clinical study supporting evidence of safety use on eyes:

Clin Ophthalmol. 2017; 11: 707–714.
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PMID: 28458509

Reduction in bacterial load using Hypochlorous acid hygiene solution on ocular skin

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Purpose

To examine the magnitude of bacterial load reduction on the surface of the periocular skin 20 minutes after application of a saline hygiene solution containing 0.01% pure hypochlorous acid (HOCl).

Methods

Microbiological specimens were collected immediately prior to applying the hygiene solution and again 20 minutes later. Total microbial colonies were counted and each unique colony morphology was processed to identify the bacterial species and to determine the susceptibility profile to 15 selected antibiotics.

Results

Specimens were analyzed from the skin samples of 71 eyes from 36 patients. Prior to treatment, 194 unique bacterial isolates belonging to 33 different species were recovered. Twenty minutes after treatment, 138 unique bacterial isolates belonging to 26 different species were identified. Staphylococci accounted for 61% of all strains recovered and *Staphylococcus epidermidis* strains comprised 60% of the staphylococcal strains. No substantial differences in the distribution of Gram-positive, Gram-negative, or anaerobic species were noted before and after treatment. The quantitative data demonstrated a >99% reduction in the staphylococcal load on the surface of the skin 20 minutes following application of the hygiene solution. The total *S. epidermidis* colony-forming units were reduced by 99.5%. The HOCl hygiene solution removed staphylococcal isolates that were resistant to multiple antibiotics equally well as those isolates that were susceptible to antibiotics.

Conclusion

The application of a saline hygiene solution preserved with pure HOCl acid reduced the bacterial load significantly without altering the diversity of bacterial species remaining on the skin under the lower eyelid.

Clinical study supporting evidence of safety use on skin

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J Clin Aesthet Dermatol. 2018 Nov; 11(11): 36–39.
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Status Report on Topical Hypochlorous Acid: Clinical Relevance of Specific Formulations, Potential Modes of Action, and Study Outcomes

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Abstract

Go to:

In-vitro and *in-vivo* studies have supported antimicrobial, anti-inflammatory, and other biologic properties of hypochlorous acid (HOCl), which has led to its use in the treatment of skin wounds, pruritus, diabetic ulcers, and some inflammatory skin disorders. Research has also shown that the physiochemical properties of HOCl after application to skin are highly dependent on both pH and formulation stability. In this review, the authors discuss a core HOCI formulation (Microcyn® Technology, Sonoma Pharmaceuticals, Petaluma, California) that is stable for up to two years, noncytotoxic, and pH-neutralized to augment therapeutic activity, skin tolerability, and stability. The authors summarize relevant study outcomes and potential modes of action related to this core HOCI formulation, as well as describe its ready-to-use vehicles that are approved and available for topical application.