



## FORMULATION EXPLAINED

**Date:** 8th April 2020

To Whom This May Concern,

This document is to verify and explain our products unique formulation and the claims and certifications associated.

Our formulation's Intellectual Property is kept as a trade secret for reasons of security, so the information contained in this document will reference the active and inert ingredients stated in our Safety Data Sheets and the aforementioned test results and product certifications.

### **FORMULATION**

Our formulation is the base of all our concentrates and ready to use disinfectants and sanitising products.

- The formulation consists of,
  - **Cationic / Non-ionic surfactant blend:** Quaternary ammonium compound (biocide used in toothpaste, antiseptic wipes) and plant-based surfactants derived from coconut oil (cleaning and foaming agents).
  - **Mineral salt solution:** Less than 1% Sodium Chlorite solution (biocide, odour control)
  - **Filtered Water:** Solvent
  - **Fragrance:** Product tracer and odour control (essential oil based)
- The uniqueness of the formulation is its ability to enhance the intended use of each ingredient, creating a synergistic chemical reaction.
  - **What does this mean?** Normally quaternary ammonium compounds need to be within a minimal percentage range in formulations to be effective against viruses and bacteria, in our synergistic formulation we achieve maximum disinfection and sanitation results at very low percentages, keeping within our safety guidelines. This is evidenced in our Test results and Certification Chart.

### **CERTIFICATIONS**

To confirm the effectiveness of our formulation at varying dilutions, we chose respected microbiological testing laboratories nationally and internationally, such as Silliker, Eurofins and Accuratus. The certificate of analysis from these tests show the formula's effectiveness as a broad-spectrum hospital grade disinfection at our recommended use dilutions of 1:40 – 1:128 achieving 4 – 6 log reductions on bacteria and viruses.

- **Viral Surrogate Testing:** When laboratories are unable to test on new or emerging viruses, surrogate viruses are used to test efficacy of disinfectants and sanitisers.

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- **FELINE CALICIVIRUS:** is a surrogate for the norovirus and one of the chosen viruses the USEPA reference as a surrogate for the Coronavirus (Covid-19). In June 2018 our formulation was tested at a 1:60 dilution and achieved the minimum log reductions (4 – 6) within 30 seconds – 10 minutes of application.
- **What does this mean?** Even though our products are USEPA registered and we can make claims against Covid-19, we currently in the process of being included on the USEPA's list of approved disinfectants and sanitisers against Covid-19 and once listed will be updated on website.
- **PEDV (ANIMAL CORONAVIRUS):** We completed this test in March 2018 at a 1:128 dilution and achieved a 6-log reduction.
- **What does this mean?** Currently the Therapeutic Goods Administration (TGA) will accept selected animal Coronavirus's as surrogates for Covid-19 if the test was performed in accordance to TGA standards. This test not only meets the requirements but allows us to begin the process of making the additional claim of Covid-19 to our current TGA listed formulation.

➤ **CERTIFICATIONS & REGISTRATIONS**

- **(USA) USEPA:** 92378-2, **(Australia) TGA:** 303171, **(NZ) MPI:** C31, C 41, C 27
- **AOAC Hard Surface Carrier Test, TGO 54 Option A, B, AOAC Germicidal SpayTest, Feline Calicivirus Viral Test, PEDV Viral Test, Canine Parvovirus Viral Test, Skin Sensitivity Test OPPTS 70.2500, Non-Corrosive Test 830-6320.**

**ALCOHOL FREE**

Our disinfectants and sanitisers are all alcohol free and water based.

- **What does this mean?** Versatility, safety and effectiveness. The previous mentioned test results already verify effectiveness, but versatility of having a product that can safely be applied to any surface, through any means of application proves this point.

**ALCOHOL BASED**

Sanitisers are highly flammable because of its minimum alcohol requirement; they have quick kill claims on viruses and bacteria but limited residual kill.

- **What does this mean?** Once applied the alcohol quickly kills within seconds, but once dried the applied surfaces and hands become susceptible to contamination.
- We understand alcohol-based hand sanitisers are approved and recognised by governing bodies, but we offer a tried and proven alternative for all general and regulated hygiene and sanitation needs.

For more information you can visit our website or contact our office.

Sincerely,

**Seed Organics Team**

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