



ALLCLEAR 
IDEAL RESPONSE

**CORONA
BUSTERS**
Virus Decontamination Service

ideal **RESPONSE**

All Clear

An industry accredited response to Coronavirus.

2020 Comprehensive Product Report



Company Overview

Corona Busters Ltd has been set up in response to the COVID-19 pandemic. Part of the Ideal Response Group - accredited specialists for over 17 years in biohazard waste containment, eradication, removal and prevention.

Together our team of over 400 highly trained and accredited technicians have been delivering COVID-19 decontamination services and long-lasting total surface protection solutions for the UK.

We are proud to be supporting various NHS facilities across the nation.



Since the outbreak began, we have been at the forefront of protecting NHS Hospitals, Private Medical Health Care Facilities and Nursing Homes. As well as numerous other businesses within the corporate and commercial sectors. We are proud of the work we are doing to keep vital health sector services operational. Helping UK businesses to safely reopen while protecting customers and staff, thus preventing a second wave and saving lives.

Product Overview

All Clear Defend is a robust tactical surface protection solution, designed to tackle the toughest viral, bacterial and pathogenic contaminations. Our patented Nano Tech Antimicrobial Compound Solution provides five months of long lasting total surface protection and has undergone rigorous testing throughout its evolution and has attained accolades including two ISO accreditations; being toy safe as well as measuring antiviral activity on plastics and other non-porous surfaces.



All Clear Defend has been leading the virus decontamination and total surface protection across the nation.

Our solution works in conjunction with electrostatic spraying equipment for mass application to all surfaces.

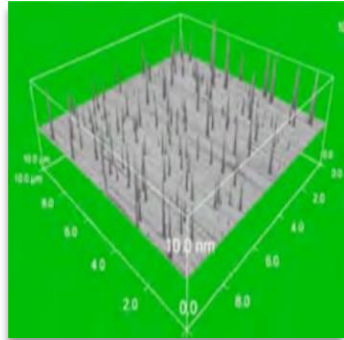
Positive and negative charges are used to prep the solution ready for application offering maximum effectiveness and longevity.

In response to the Coronavirus pandemic, our All Clear Defend COVID-19 decontamination service and long-lasting total surface protection solutions are providing the highest level of certified scientifically proven protection, helping to prevent a second wave and save lives.

Product Details

The Product

All Clear Defend is a Patented Nano Tech Electrostatically Charged Antimicrobial Compound Solution. The Microbiostatic Antimicrobial Coating prevents the spread and growth of viruses, bacteria, mould, mildew, algae, and yeast. The compound acts like a bed of microscopic spikes that pierce the cell walls of microbes providing long-lasting antimicrobial protection.



How it Works

The solution is dispensed using specialized electrostatic spraying machines which charge the particles. This enables the solution to bind itself on a molecular level onto the treated surfaces creating an antimicrobial surface coating that will last for over five months. One end of the molecule creates a strong bond with both porous and non-porous surfaces, forming a highly durable protective coating. Almost any surface can be treated, tables, desks, chairs, walls, door handles, light switches and even fabrics.

The other end of the molecule forms microscopic barbs. When a virus comes into contact with the treated surface, these barbs penetrate the structure of the pathogen and physically ruptures the cell walls of the microbes killing it and creating a hostile surface environment which prevents it from spreading. The compound was developed to deliver a mechanical kill, so no harmful chemicals are used. The product is safe for the environment, humans, and pets. It is non-dissipating, non-leaching, non-migrating from the applied substrate and cannot be absorbed by micro-organisms or by humans. It is registered with the Environmental Protection Agency and complies with European Safety Standards.

Product Timeline

2010

A five month rigorous independent clinical test trial was conducted and approved by the Environmental Protection Agency to test the effectiveness of our technology in live Hospital settings. Three Hospitals were chosen and various high traffic areas including the emergency room waiting area as well as inpatient rooms were treated.

Between 3 to 19 different surface areas in each room were selected for monitoring including key touch points. Swab tests were taken every 15 days. Each test was monitored by the environmental supervisor of the facility and sent for analysis at two independent laboratories.

Results from the experiment revealed All Clear Defend Technology to be extremely effective on both porous and non-porous surfaces. At the end of the 5 month trial, results yielded measurements of a total decrease in microbes and bacteria of up to 99.87%.

2012

Our patented Nano-Technology underwent a series of testing and refinements making the solution effective against the following viruses, pathogens, and/or harmful bacteria:

- Associated coronaviridae strains
- MRSA
- Bird Flu N5N1
- E.Coli
- C.Diff.
- SARS
- Tuberculosis
- HIV (Aids)
- Legionella Pnuemophila
- Hepatitis B
- Hepatitis C

2020

Further research and development has continued since the outbreak of the Coronavirus pandemic. Our Patented Nano Tech Compound Solution has undergone further iterations of being refined and tested for its effectiveness against COVID-19.

Confirmation has now been attained that All Clear Defend is effective against the human coronavirus (COVID-19).

Efficacy Reports: All Clear Defend

Virucidal Data

Protocols for Testing the Efficacy of Disinfectants against Hepatitis B Virus (HBV) (EPA, Federal Register, Vol. 65, No. 166, 8/25/2000, p. 51828).

Protocol for Testing Disinfectants against Hepatitis C Virus using Bovine Viral Diarrhea Virus as approved by the U.S. EPA.

U.S. E.P.A. Pesticide Assessment Guidelines, Subdivision G: Product Performance, 1982, Section 91-30, pp. 72-76. Virucide Assay (EPA, Federal Register 10, No. 123, 6/25/75, p. 26836): 3.5 ounces/5 gallons dilution, 10-minute contact time, glass petri dish substrates, 18.5-25°C exposure temperature, tested in the presence of serum.

Results

Test Organism	Titer Reduction (measuring concentration)
Adenovirus Type 5	Sample A: $\geq 3.0 \log_{10}$ Sample B: $\geq 3.3 \log_{10}$
Avian Influenza A/Turkey/Wisconsin (ATCC VR-798)	Sample A: $\geq 5.5 \log_{10}$ Sample B: $\geq 5.5 \log_{10}$
Bovine Viral Diarrhea Virus (BVDV)	Sample A: $5.93 \log_{10}$ Sample B: $5.93 \log_{10}$
Hepatitis B Virus (HBV) (Duck Hepatitis B Virus- DHBV) *SARS associated Coronavirus (ZeptoMetrix)	Sample A: $4.68 \log_{10}$ Sample B: $4.68 \log_{10}$
Hepatitis C Virus (HCV) (Bovine Viral Diarrhea Virus-BVDV)	Sample A: $5.93 \log_{10}$ Sample B: $5.93 \log_{10}$
Herpes Simplex Type 1 (Sabin)	Sample A: $4.0 \log_{10}$ Sample B: $4.0 \log_{10}$
Human Coronavirus (ATCC VR-740, strain 229E)	Sample A: $\geq 4.25 \log_{10}$ Sample B: $\geq 4.25 \log_{10}$
Human Immunodeficiency Virus, HIV-1, strain HTLV- III B, (associated with AIDS)	Sample A: $\geq 3.5 \log_{10}$ Sample B: $\geq 3.5 \log_{10}$
Influenza A ₂ (Japan 305/57)	Sample A: $\geq 7.5 \log_{10}$ Sample B: $\geq 7.5 \log_{10}$

Laryngotracheitis (LT- IVAX)	Sample A: 4.75 log ₁₀ Sample B: ≥4.75 log ₁₀
Newcastle Disease Virus (strain H.J. Roakin, 1946)	Sample A: ≥5.5 log ₁₀ Sample B: ≥5.5 log ₁₀
Coronavirus (ZeptoMetrix)	Sample A: 4.03 log ₁₀ Sample B: 4.03 log ₁₀
Vaccinia (Wyeth)	Sample A: 3.5 log ₁₀ Sample B: 3.5 log ₁₀

Conclusion

Under the conditions of this investigation, All Clear Defend Solution was virucidal for Adenovirus Type 5, Avian Influenza A/Turkey/Wisconsin, Bovine Viral Diarrhea Virus (BVDV), Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Herpes Simplex Type 1 (Sabin), Human Coronavirus, Human Immunodeficiency Virus (HIV-1), Influenza A2 (Japan 305/57), Laryngotracheitis, Newcastle Disease Virus, SARS associated Coronavirus and Vaccinia (Wyeth) according to criteria established by the U. S. Environmental Protection Agency for registration and labeling of a disinfectant product as a virucide.

Efficacy Reports: Continued

Sanitization Data

Test Method: AOAC Germicidal and Detergent Sanitizing Action of Disinfectants
 Test Conditions: synthetic hard water as 650 ppm hardness (as CaCO₃)
 200 ppm active quaternary (public eating establishments and dairies)
 200-400 ppm active quaternary (food processing equipment/utensils)
 1-2 ounces/4-gallon dilution

Results

*TOTAL BACTERIA COUNTS/
 % KILL vs. EXPOSURE TIME*

Initial inoculum

Organism	30 seconds Sample	TBC*	% Kill	60 seconds TBC*	% Kill	Control count
Staphylococcus aureus (ATCC 6538)	A	970	99.999	105	99.999	7.8 x 10 ⁷
	B	1285	99.999	205	99.999	9.2 x 10 ⁷
	C	1145	99.999	130	99.999	9.3 x 10 ⁷
Escherichia coli (ATCC 11229)	A	1125	99.999	50	99.999	1.0 x 10 ⁸
	B	1075	99.999	95	99.999	9.3 x 10 ⁷
	C	835	99.999	75	99.999	8.1 x 10 ⁷
Campylobacter jejuni (ATCC 29428)	A	790	99.999	410	99.999	8.6 x 10 ⁷
	B	780	99.999	470	99.999	8.6 x 10 ⁷
Escherichia coli O157:H7 (ATCC 43895)	A	1220	99.999	110	99.999	9.2 x 10 ⁷
	B	1000	99.999	125	99.999	9.2 x 10 ⁷
Listeria monocytogenes (ATCC 35152)	A	<10	>99.999	<10	>99.999	7.8 x 10 ⁸
	B	<10	>99.999	<10	>99.999	7.8 x 10 ⁸
Methicillin resistant Staphylococcus aureus (ATCC 33592)	A	950	99.999	<10	>99.999	1.0 x 10 ⁸
	B	970	99.999	<10	>99.999	1.0 x 10 ⁸
Salmonella typhi (ATCC 6539)	A	<10	>99.999	<10	>99.999	1.4 x 10 ⁸
	B	<10	>99.999	<10	>99.999	1.4 x 10 ⁸

Shigella sonnei (ATCC 11060)	A	680	99.999	<10	>99.999	9.3×10^7
	B	4500	99.999	<10	>99.999	9.3×10^7
Vancomycin resistant Enterococcus faecalis (ATCC 51299)	A	<10	>99.999	<10	>99.999	1.2×10^8
	B	<10	>99.999	<10	>99.999	1.2×10^8
Vibrio cholera (ATCC 14035)	A	<10	>99.999	<10	>99.999	8.3×10^7
	B	<10	>99.999	<10	>99.999	8.3×10^7
Yersinia enterocolitica (ATCC 23715)	A	108	99.999	<10	>99.999	1.7×10^8
	B	1300	99.999	263	99.999	5.9×10^8

*TBC = Total Bacterial Count, organisms/ml
Kill calculation based on Initial Inoculum Control Count.

Sanitization Conclusion: Under the conditions of these investigations, All Clear Defend solution demonstrated sanitizing activity against Staphylococcus aureus, Escherichia coli, Campylobacter jejuni, Escherichia coli O157:H7, Listeria monocytogenes, Methicillin resistant Staphylococcus aureus, Salmonella typhi, Shigella sonnei, Vancomycin resistant Enterococcus faecalis, Vibrio cholera and Yersinia enterocolitica according to criteria established by the U. S. Environmental Protection Agency.

Conclusion

Many years of research and development have gone into the creation of All Clear Defend. The technology has undergone extensive independent laboratory tests and clinical test trials and has a long history of safe use. It is registered with the EPA and is approved for use among European Safety Standards. The information contained within this report provides compelling scientific evidence to support Corona Busters Ltd (Part of Ideal Response) claim that its Patented Nano Tech Electrostatically Antimicrobial Compound Solution - All Clear Defend will provide five months of total surface protection and is effective against COVID-19.

In addition to this it also has many other benefits including the prevention, spread and growth of viruses, bacteria, mould, mildew, algae, and yeast. It is also effective against MRSA, Bird Flu N5N1, E.Coli, C.Diff, SARS, Tuberculosis, HIV (Aids), Legionella Pnuemophila, Hepatitis B, Hepatitis C and many other harmful bacteria, microbes and pathogens.

Summary

The All Clear Defend solution has a multitude of applicational uses across a broad spectrum of industries and scenarios. Many hospitals, doctors' surgeries, nursing homes and mental health institutions as well as businesses in the corporate and commercial sector have already reaped the benefits of our long-lasting total surface protection for 5 months.

* Case studies available upon request

All Clear Defend has multiple applications and can be used in many sectors.

- ✓ Government
- ✓ Healthcare
- ✓ Education
- ✓ Public & Private Transport
- ✓ Leisure & Tourism
- ✓ Industrial
- ✓ Inside Building Structures
- ✓ In Laboratories
- ✓ Mattresses, Fabrics & Bedding
- ✓ Electrical Equipment
- ✓ Hard and Soft Surfaces
- ✓ Toy Safe and many more...



All Clear Defend Total Surface Protection Solution has been approved for use and registered with the Environmental Protection Agency (EPA). All Clear has also been approved for use among European Safety Standards.

Contact Details

Take advantage of our rapid professional and affordable service by contacting us now.

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