



## THE INTEGRATED ACTIVE ENVIRONMENTAL **BIO-DECONTAMINATION**

### **INFINITY BIOTECH**

The integrated active environmental Bio-decontamination is carried out by Indoor Ambiente S.r.l and involves working in environments that are contaminated by both biological and microbiological pathogens in order to achieve the complete abatement of the environmental biological contamination without using toxic or harmful substances for human health.

**Log7 atomization = 99.99999% of biocidal efficacy**





# BIO-DECONTAMINATION

The integrated active environmental Bio-decontamination INFINITY BIOTECH Indoor Ambiente Srl is a leading-edge technology in the treatment of decontamination, sanitification, and maintenance of the quality level achieved. It has been specifically studied for all the exposed areas within the involved environments.

The environmental Bio-decontamination INFINITY BIOTECH, carried out by our company, guarantees the highest efficacy available on the current market since it is based on the environmental saturation of stabilized hydrogen peroxide in aqueous solution at low concentration and with no silver ions. It is atomized in nanoparticles of few micron by specific machines named ICUBE that are chosen depending on the type of environment in which an intervention is needed.

The supplied product comes as a dry fog and it has the following typical properties:

- ✓ **A few minutes after the product is spread in the environment, it recombines with the oxygen**
- ✓ **It doesn't create deposits and the removal is not needed**
- ✓ **Non-corrosive**
- ✓ **Non-toxic**
- ✓ **It doesn't create moisture**
- ✓ **Currently, the integrated active environmental bio-decontamination is the only system on the market that holds an international certification against all the pathogen included the Coronavirus**



# THE ENVIRONMENTAL SATURATION

The environmental saturation of our product allows to kill all pathogens, both those listed in the attached certification of the product and those in the areas of the treated environments. Thus, it can guarantee a total and complete environmental safety of those that occupy the environment. There are also virus, bacteria, spores, moulds and fungi, that can eventually be present and jeopardize the health of people. The environmental bio-decontamination system Indoor Ambiente allows to achieve the following high standards of quality and operating efficacy.

## Rapidity

The environmental safety times of the infinity system based on our stabilized hydrogen peroxide product, are fast and allow to secure a 25 SM room in 5 minutes that can be accessible after 15 minutes. Once that the environmental saturation is carried out, precisely 10 minutes after the process, the product begins his degradation and it recombines with the oxygen.



## Ecological Product

The product is over 99% biodegradable, it is non-toxic and it doesn't produce deposits on the surfaces. Furthermore, it is non-corrosive.



## Efficacy

The product particle sizes of a few microns produce the highest saturation efficacy that has convenient disinfection costs in comparison to other systems available on the market, which don't reach the LOG 7 grade (99.99999% of biocidal efficacy). This LOG 7 grade, according to some recent tests, is able to reach an atomization level that is higher than ULPA 17 cleaner.



**EN1822 -2009**

Filter Class	Value	
	Efficiency (%)	Penetration (%)
E10	85	15
E11	95	5
E12	99,5	0,5
H13	99,95	0,05
H14	99,995	0,005
U15	99,9995	0,0005
U16	99,99995	0,00005
U17	99,999995	0,000005



**OFFICES**



**SHOPPING CENTER**



**COMPANIES**



**HEALTHCARE SETTING**

# THE OPERATIONAL COMBINATION

The operational combination of our iCube machines with the INFINITY H<sub>2</sub>O<sub>2</sub> product (naturally stabilized hydrogen peroxide, without additives or heavy materials, such as gold and silver), allows to reach the highest LOG 7 (99,9999) grade of disinfection available on the market. It can also allow to reach the total and complete elimination of any pathogenic microorganisms by atomizing INFINITY H<sub>2</sub>O<sub>2</sub> in microparticles of 0,15 MICRON.



The operational procedure is carried out in every environment with no people inside and in about 15 minutes in a 25 SM room. Thus, if it is necessary the process can be carried out at night by using more machines at the same time. It is important to have the floor plan of the building that need to be decontaminated, in order to do an economic evaluation. The treated environments are accessible 20 minutes after the end of the treatment.

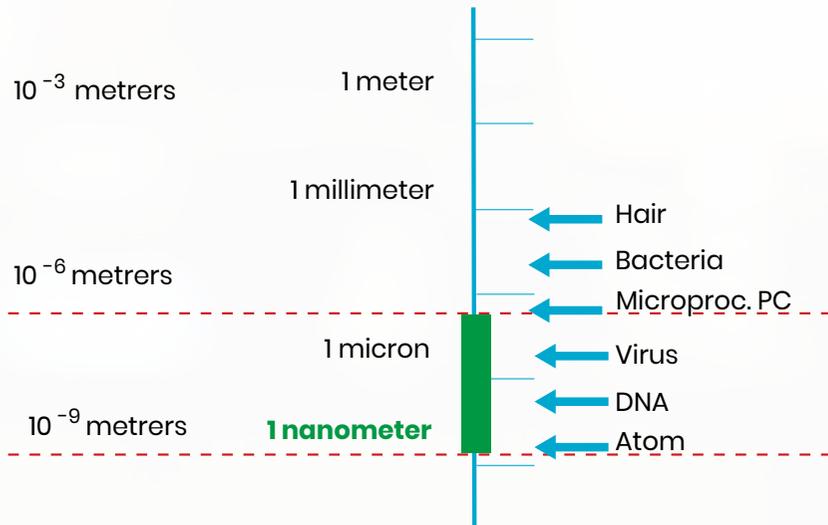
Our unique environmental disinfection treatment doesn't produce VOC (VOLATILE ORGANIC COMPOUNDS) and it has a fast degradation (lower than 99,99%) that occurs in less than 15 minutes.

Our H<sub>2</sub>O<sub>2</sub> product (100% biodegradable) is the only stabilized MONO-INGREDIENT product, without silver salts or other additional substances. It is undoubtedly the most efficient, effective and ultra-rapid bactericidal, virucidal, fungicidal, sporicidal and tuberculocidal with an elimination capacity (BIOCIDAL EFFECT) of 99.99999%. 1 liter of our H<sub>2</sub>O<sub>2</sub> product covers 1,000 MC in an hour: in a hospital, for example, a surgery room of 100 SM can be totally disinfected and decontaminated, NO-TOUCH and without "MIST EFFECT" in about 6 minutes.

ATTACHED:

**INTERNATIONAL CERTIFICATION OF OUR INFINITY H<sub>2</sub>O<sub>2</sub> PRODUCT**

## THE NANO-SIZE



**GYMS**



**UNIVERSITY**



**HOTELS**



**PUBLIC OFFICE**



## THE INTEGRATED ENVIRONMENTAL BIO-DECONTAMINATION

A new environmental biodecontamination technique is to treat the environment through a central air conditioning system that normally involves all the treated areas thanks to both, the ducting network and the several inlet air.

The technique is exclusive of our company, that has been specialized in the remediation of air conditioning system for 25 years. The technique involves working in environments without people and allows to release our Infinity H2O2 product in the ducting system while it is working. Thus, it is possible to saturate, both the system made up of HAU and the related pipes by getting a complete decontamination and achieving two main objectives. The first one is the decontamination of the facility from viruses, bacteria, allergens, spores and moulds and the second one is the environmental decontamination of all the environments served.

This new exclusive technique of our company can be applied upon check of the facility that must be controlled according to the necessary requirements by the Italian regulation in force. Leg. Decree 81/2008 and 13/02/2013.

## TAX CREDIT

In accordance with the article 64 of Decree Law, 17 March 2020, there is a tax credit for 50% of the environment sanification costs that have been incurred and documented up to €20,000.

# PHYSICO-CHEMICAL CHARACTERISTICS

Composition		
Element	Concentration %	Case number
Hydrogen Peroxide	5% < C < 8%	7722-8-4-1
Stabiliser, Excipient and water, qba	100	

Physico-Chemical Characteristic			
Physical State	Liquid	Melting Point (°C)	-6°
Color	Colorless	Water solubility	Totally soluble in any proportion
Smell	Odorless	Viscosity at 20° C (cP)	1,01

Stability and expiration date	
Stability related to the temperature:	Stable in broad spectrum: 0°C - 80°C Excellent at : 5° C - 25 °C
Stability towards organic matter:	Stable at high level of organic matter
Expiration date:	More than 3 years
Potere residuale:	Elevated

Activity	
Registration:	- RSI - 37,01372/HU - ROESB - 0003A22-1FB - MSC - 06-20/40-04413 - 06-20/40-04413 HA
Bactericidal activity:	- Broad Spectrum (Gram + e-) - It doesn't produce bacterial resistance for continued use. - UNI-EN 1040. Basic bactericidal activity. - UNI-EN 1276. Bactericidal activity of antiseptics and chemical disinfectants used in food products, in industries and at home.
Fungicidal activity:	- Broad spectrum. - Broad spectrum. - UNI-EN 1275. Basic fungicidal activity. - UNE-EN 1650. Fungicidal activity of antiseptic and chemical disinfectants used in food products, industries and at home.
Virucidal Activity:	Broad spectrum.
Sporicidal Activity:	Broad spectrum (Bacterial and fungal spores).
Cleaning Activity:	Disinfection of ducts.

Activity the different kinds of disinfectants vs some pathogens						
Disinfectant	Phenols	Aldehydes	Chlorates	Ammonium	Iodophor	Infinity H202
Virus	+	+	++	+ -	+ -	++
Bacteria	++	+	++	+ (G+)	+ (G+)	++
Spores	-	+	-	-	+	++
Pungi	+	+	+	+ -	+	++

Application	
Environment	Environmental use: Reduction of the bacterial count prevention of the building (SEE). 10-15 cc di Infinity H2020 / m³ of the air of the room. It doesn't need rinse.
Air conditioning channel	Air disinfection and air conditioning channel disinfection . 6-20 cc di Infinity H2020/ linear meter of the ducts. It doesn't need rinse.

Proprietà di Infinity H202 v/s altri disinfettanti						
Disinfectants	Phenols	Aldehydes	Chlorates	Ammonium	Iodophor	Infinity H202
Biodegradable	-	-	-	-	-	+
Corrosive to the doses in use	-	-	+	-	+	-
Temperature	+	+	-	+	-	+
Compatibility with detergents	+	+	+	+	-	+
Organic matter	-	+	+ -	+	-	+

Environment	
Biodegradability:	A 100% biodegradable product

Check	
Test papers reactive to the peroxide:	Reactive test Merckoquant®
	



# **CERTIFICATIONS**





**WE CERTIFY:**

That the tests enabled on the **INFINITY MINI BASIC CUBE** nebulization equipment and the **INFINITY H2O2** product, manufactured by **INFINITY BIOTECH S.P.A.** with address at **Via Madre Teresa di Calcutta 7-9 29122 Pacenza (Italy)**, acts effectively on the relationship that below we attach viruses, bacteria, nematodes, spores of fungus and mold, yeast, protozoa and algae through its power disinfectant.

**VIRUS**

Adenovirus (tipo 7a)	Influenza
Bacteriófago (E. coli)	Mosaico del tabaco
Coliphage	Orthomyxoviridea
Corona	(virus causante de la gripe A)
Cryptosporidium	Paramyxoviridae
Cytomegalovirus	Poliomielitis
Coxsackie A9, B3, B5	Pneumophila de Legionella
Estomatitis vesicular	Retroviridae (SIDA)
Encephalomyocarditis	Rhabdoviridae (rabia)
Echovirus 1, 5, 12 y 29	Rotavirus
Epstein Bar	Syphilis
Flavivirus	SIDA
Gripe H1N1, H3N2, H5N1, H7N7	Toga
Herpes (todos los tipos)	Virus de GD V11
Hepatitis A	Virus de la poliomieltis (Pollomyelitus)
Hepatitis de Onfectious	



**BACTERIAS**

Achromobacter	Coliphage
Aeromonas hydrophilia	Coma del vibrión
Aeruginosa de los Pseudomonas	Corynebacterium diphtheria
Agrobacterium tumefaciens	Cryptosporidium
Albus del estafilococo	Diphthriae del Corynebacterium
Alginolyticus y angwillarum del vibrión	Eberthlla typhosa
B. stearotherophilus	Enteritidis de salmonelas
Bacilo anthracis	Escherichia coli
Bacilo cirio	Estafilococo áureo
Bacilo globiagli	Estreptococo "C"
Bacilo licheniformis	Estreptococo hemolyticus
Bacilo paratyphosus	Estreptococo lactis
Bacilus anthracis	Estreptococo salivarius
Bacilus megaterium	Estreptococo viridans
Bacilus merentericus	Estreptococo-faecalis
Bacilus spores	Flexnaria de Shigella
Bacilus subtilis	Fluorscens (biofilms)
Botulinum de Clostridium	Harveyi NC-2 del Aeromonas
Butyri NCI-9404 del Achromobacter	Histolica de la endameba
C. sporogenes	Ichthyodermis NC- 107 de Virrio
Candidus del micrococo	Legionella bozemanii
Canicola del Leptospira	Legionella dumoffii
Caseolyticus KM-15 del micrococo	Legionella gormanii
Catarrhalis de Neisseria	Legionella longbeachae
Choleraesuis de las salmonelas	Legionella miodadel
Clorarae del vibrión	Legionella paeumophila
Clostridium tetani	Leprae del Mycobacterium
Coagulans del B.	Leptospira cancioa



### NEMATODOS

Huevos

### ESPORAS DEL HONGO Y DEL MOLDE

Alli del Botrytis

Aspergillus flavus (amarillento-verde)

Aspergillus glaucus

Aspergillus Niger (negro)

Candidus del Aspergillus

Chrysogenum y citrinum del P.

Clustridium perfringens

Cyclopium del penicillium

Digitatum de penicillium (aceituna)

Egyptiacum del penicillium

Expansum del penicillium (aceituna)

Fusarium oxysporum

Glaucum del penicillium

Glaucus del Aspergillus (azulado-verde)

Grotrichum

Lactis de Oospora (blanco)

Lagenarium de Colletotrichum

Mentagrophytes

Mucor (racemosus A y B) (blanco-grises)

Microsporon audoaini

Microsporon lenosus

Monilia albicans

Nigricans del Rhizopus (negro)

Oospora lactis

Penicillium digitatum

Penicillium expensum

Penicillium roqueforti

Piriformis del Mucor

Rhizopus stolonifer

Rhizopus nigricans

Roqueforti del penicillium (verde)

Terreus, saitoi y oryzae del Aspergillus

Trichophyton purpureum



Leptospira interrogans

Listeria

Lutea del Sarcina

Marcescens de Seratia

Micrococcus candidus

Micrococcus sphaeroides

Mycobacterium avium

Mycobacterium leprae

Mycobacterium tuberculosis

Neisseria catarrhalis

Nocardia coralline

Paradysenteriae de Shigella

Paratyphi de las salmonelas

Phytomonas tumefaciens

Prodigiosus del B.

Proteus vulgaris

Pseudomonas

Pseudomonas aeruginosa

Pseudomonas fluorescens

Putida de los Pseudomonas

Rhodospirillum rubrum

Rubra del Torula

Rubrum de Spirillum

Salmonella enteritidis

Salmonella paratyphi

Salmonella Typhimurium

Salmonella typhosa

Salmonicida NC-1102 del Aeromonas

Sarcina lutea

Serratia marcescens

Shigella dysenteriae

Shigella flexneri

Shigella paradysenteriae

Shigella sonnei

SP A-3 de Flavorbacterium

Spharaeroides del micrococo

Staphylococcus albus

Staphylococcus aureus

Staphylococcus epidermidis

Staphylococcus faecalis

Streptococcus hemolyticus

Streptococcus lactis

Streptococcus salivarius

Streptococcus viridians

Tetoni del Clostridium

Tuberculosis del Mycobacterium

Tumefaciens de Phytomonas

Typhimurium de salmonelas

Typhosa de Eberthella

Typhosa de las salmonelas

V. parahaemolyticus

Vibrio cholerae

Vibrio comma



#### LEVADURAS

Candia albicans-todas las formas  
Levadura del panadero  
Saccharomyces cerevisiae  
Saccharomyces ellipsoideus  
Saccharomyces sp  
SP del saccharomyces  
Torta común de la levadura

#### PROTOZOS

Chlorella vulgaris (algas)  
Huevos del nematodo  
Paramecium (patógenos o no)  
Todas las formas patógenas y no patógenas de protozoos

#### QUISTES

Lambliia de Giardia  
Muris de Giardia  
Parvum de Cryptosporidium

#### PARÁSITOS

Cryptosporidium  
Gairdia lambliia



#### PATÓGENOS FUNGICIDA

Laxa de Monilinia  
Stolonifera del Rhizopus  
Sclerotiorum de Sclerotinia  
Alternaria solani  
Pythium ultimum  
Rhizoctonia solani  
Rolfsii del Sclerotium  
Botrytis cinerea  
Parasitica de Phytophthora

Erythroseptica de Phytophthora  
Fusarium oxysporum  
Fruiticola de Monilinia

#### ALGAS

Albo-atrum de Verticillium  
Chiorrella vulgaris  
Dahliae de Verticillium  
Thamnidium  
Tricoderma viride

What we do record so that it has the appropriate effects.

Sant Fruitós de Bages, 20 de febrero de 2018

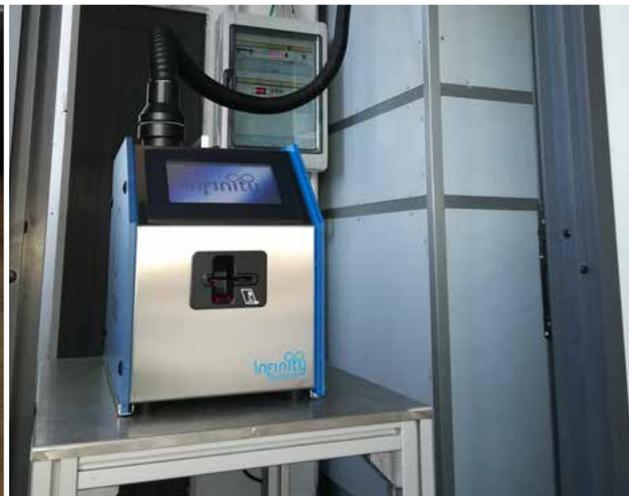


CENTRO DE INVESTIGACION Y ASSESORAMIENTO PARA  
LA LIMPIEZA  
C/ Cadi, 27 - C/ Moixeró, 30 - Poligon Industrial Riu d'Or  
08272 Sant Fruitós de Bages - (Barcelona)  
TEL.: 93-877 40 01  
FAX: 93-877 40 78  
Correo electrónico: itel@itelspan.com  
Pág.web: <http://www.itelspan.com>

  
Valentí Casas  
Presidente de ITEL

# OUR INTERVENTIONS







# indoor

A M B I E N T E

## PLACE OF BUSINESS

Roma - Via Valentino Mazzola 18 - 00142

Milano - Via Selvagreca, 14 - 26900 Lodi

Vicenza - Via Zamenhof 817 - 36100

Taranto - Via dei Funari 13 - 74016 Massafra

Svizzera - Via Sottomontagna, 31 - 6512 Giubiasco Bellinzona



## CONTACTS

 800 32 43 00

[www.indoorambiente.it](http://www.indoorambiente.it)

 [info@indoorambiente.it](mailto:info@indoorambiente.it)



CALL US ON OUR  
TOLL-FREE NUMBER  
**800 32 43 00**