



## TEST Sars-CoV2

*Résumé des résultats des tests certifiés*

*Octobre, 2021*



# Déclaration des résultats des tests certifiés Sars-CoV2

Déclaration Approuvée

## Elimine plus de 99.99% de la Covid-19<sup>†</sup>

Déclaration de soutien scientifique approuvée en date du 29.09.21

Les purificateurs d'air Antibacteries® AB3 et AB4 ont démontré, par le biais de test en laboratoire indépendant, leur efficacité à éliminer la **concentration du SRAS-CoV-2** en suspension de 99,9999 % lors d'un test de passage unique du purificateur.

De plus, les purificateurs d'air Antibacteries® ont atteint une réduction de 99,99 % de la concentration en aérosol d'un substitut du Coronavirus humain 229E dans une chambre d'essai de 20m<sup>3</sup> en une heure de fonctionnement lors d'un test séparé.

# Résumé du test Coronavirus Covid-19


- Antibacteries® et Fellowes se sont associés au professeur A. Izzotti, de l'École d'Hygiène et de Médecine Préventive de l'Université de Gênes, en Italie.
- L'étude expérimentale est portée sur l'efficacité du système Antibacteries® à capturer et neutraliser le virus SARS-CoV-2.
- Les tests ont été réalisés avec des particules de SARS-CoV-2 en suspension dans l'air.
- Les particules en suspension ont été canalisées directement dans l'entrée des purificateurs AB PRO et les particules ont été mesurées à la sortie pour mesurer le pourcentage de capture à 99,9999 %.
- Des tests d'essuyage ont été effectués dans les 5 minutes suivant la fin du test sur le filtre HEPA, le cadre du filtre et le pré filtre pour vérifier qu'ils ont joué un rôle dans la capture du virus.
- La méthodologie complète du test est disponible ainsi que les rapports de test du laboratoire.

# Méthodologie du test

- Des échantillons de prélèvement de gorge contenant le virus sauvage viable du SRAS-CoV-2 ont été utilisés pour générer des aérosols et des gouttelettes (aérosols). Cet aérosol reproduit donc le vecteur des virions infectants.
- Des échantillons contenant des charges élevées de virus sauvage du SRAS-CoV-2 ont été utilisés pour générer des aérosols diffusibles dans l'air, canalisés dans un flux d'air. L'aérosol généré a été acheminé par des tubes en plastique flexible vers l'échantillonneur à bulles.
- La capacité du système Antibacteries® examiné à réduire la charge virale en suspension dans l'air contenue dans l'aérosol généré a été testée. Le flux d'aérosol a été canalisé dans les buses d'aspiration de l'appareil. L'air émis a ensuite été recueilli dans un sac placé de manière à couvrir et à sceller les bords de l'AB III entourant les grilles d'émission de l'air traité. Le sac a été dégonflé avec le dispositif éteint et gonflé avec le dispositif en fonctionnement, permettant ainsi un contrôle direct de l'émission correcte du flux d'air traité par l'instrument.
- De plus, l'appareil a été ouvert et des échantillons des deux filtres ont été prélevés par excision, à l'aide d'un scalpel. Les charges virales sur les filtres ont été collectées par un test d'essuyage immédiatement après la fin des expériences, c'est-à-dire dans les 5 minutes suivant l'extinction des instruments.
- Le test effectué a permis de constater que le dispositif Antibacteries® est capable de décomposer complètement une charge virale aérienne même très élevée de virus sauvage SARS-CoV-2, en un seul passage d'air.

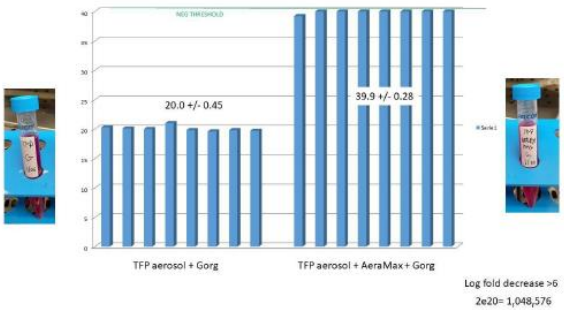
# Antibacteries® et Fellowes s'engage à étendre ses tests avec des laboratoires indépendants et certifiés

## SARS-CoV-2



UNIVERSITA' DEGLI STUDI DI GENOVA  
DIPARTIMENTO DI MEDICINA SPERIMENTALE

<b>Product description</b>	Fellowes AeraMax Professional AM3
<b>Settings:</b>	Manual mode, speed 5, ionizer OFF
<b>Manufacturer</b>	Fellowes
<b>Type of test</b>	Experimental study on the effectiveness of an air purifier for confined environments (Fellowes AeraMax Professional™) in neutralizing the contagiousness of the SARS-CoV-2 virus
<b>Methodology</b>	Producing a viral aerosol, passing the viral aerosol through the purifier, collecting samples and evaluating the infectious viral load by cell culture and molecular PCR analysis



Log fold decrease >6  
2e20= 1,048,576

**RESULTS**


This experiment demonstrates that the Fellowes AeraMax Pro AM 3 air purifier was able to completely neutralize the airborne viral load of SARS-CoV-2. In the experiment, the value of the PCR cycle turned negative compared to the non-purified sample, which had a value of 20.

Therefore, the Fellowes AeraMax Pro AM 3 air purifier is able to eliminate 99.9999% of the aerosolized SARS-CoV-2, with the air passing through the purifier a single time.

Genoa 07/23/2021

Prof. A. Izzotti, MD PhD,

Full Professor of Hygiene and Preventive Medicine, School of Medicine, Department of Experimental Medicine, University of Genoa




Prof. ALBERTO IZZOTTI  
MEDICO CHIRURGO  
1971-1984

## Elimine plus de 99.99% de la Covid-19

† Les purificateurs d'air Antibacteries® AB3 et AB4 ont démontré, par le biais de tests en laboratoire indépendant, leur efficacité à éliminer la concentration du SRAS-CoV-2 en suspension de 99,9999 % lors d'un test de passage unique du purificateur.

# Existing Test Reports

## CORONAVIRUS\*



**Test Summary**

The following product has been tested by Shanghai WEIPU Chemical Technology Service Co., Ltd as outlined in report: WP-21036198-JC-01En.

**Product Description**  
AeraMax Pro

**Manufacturer**  
Fellowes

**Test specification**  
Technical specification for disinfection (2002) 2.1.3

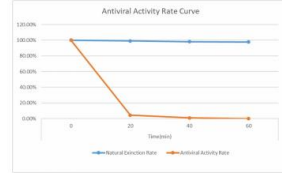
**Test Method**  
Determination of removal efficiency of HCoV 229E following aerosolization of the virus into a 20m<sup>3</sup> environmental test chamber. The device operated at max speed and ionizer ON during test.

**Additional SKUs**  
AeraMax Pro

**RESULTS**

The AeraMax Pro air purifier product was demonstrated to achieve 99.99% airborne virus reduction within the first hour of operation at the highest air flow rate. The below table shows the test summary based on the tested product with the installed filters.

Unit	AeraMax Pro AM35 PC	
Filters	Pre-Filter+Carbon filter+HEPA filter	
Time	Natural Extinction Rate (%)	Antiviral Activity Rate (%)
20min	0.96	95.70
40min	1.92	99.05
60min	2.32	> 99.99




Antiviral Activity Rate Curve

Shanghai WEIPU Chemical Technology Service Co.,Ltd  
Building 9, building 10, building 18, Yanqiu Urban Industrial Park, Lane 139, Guowei Road,  
Yangpu District, Shanghai (200438) www.weipugroup.com

## H1N1\*\*

**TEST CERTIFICATE**



Independently tested by  
**airmid**  
healthgroup  
airmid@healthgroup.com

The following products have been tested by airmid healthgroup Ltd as outlined in report(s) ASCR092102(s)

**Product Description**  
AeraMax Pro AM 3

**Manufacturer**  
Fellowes

**Certification Number**  
JHGC: 92102/15/05/08/2000/01


**Validation Period**  
3 Year

**Outline of Test Method**  
Determination of removal efficiency of Influenza A [H1N1] following aerosolization of the virus into a 20 m<sup>3</sup> environmental test chamber.

**Additional SKUs**  
AeraMax Pro AM35, AM35 PC, AM35 PC  
AeraMax Pro AMV, AMV5, AM4 PC, AM45 PC

**RESULTS**

The Fellowes AeraMax Pro has been shown to remove 99.9% of airborne virus within 35 minutes of operation




Influenza A percentage reduction over time with and without the AeraMax PRO AM 3 Air Purifier operating.\*

\*Please disregard the average of each run. Certain settings A, water ON and filter Significant improvement in removal of H1N1 virus at low speed device setting C. Settings on and filter at high speed.

Dr Bruce Mitchell  
Chairman/CEO  
airmid healthgroup Ltd

Dated  
16 MAY 2021



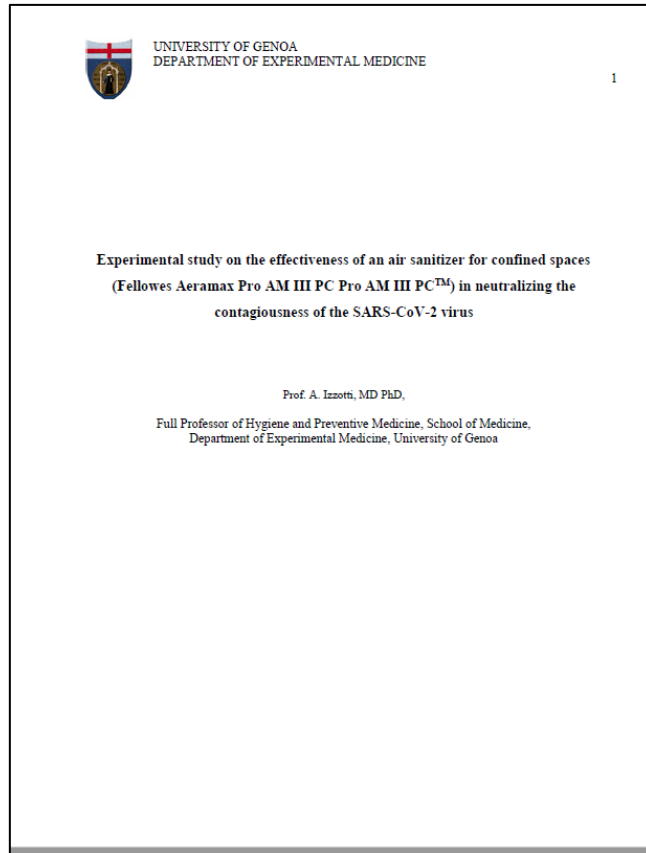
airmid healthgroup Ltd Unit 17 Trade Enterprise Campus, Mackay Street, Dublin 2, Ireland. Tel: +353 1 453 8500. Email: contact@airmidhealthgroup.com. www.airmidhealthgroup.com  
Made in China. Report No: ASCR092102

\*Antibacteries® by Fellowes air purifiers were demonstrated through independent laboratory testing to be effective in reducing aerosolized airborne concentration of Human Coronavirus 229E in a test chamber, reaching 99.99% airborne reduction within 1 hour of operation.


\*\*Antibacteries® Pro has been shown to remove 99.99% of airborne virus within 35 minutes of operation.

# Nos rapports de test

## Rapport Complet

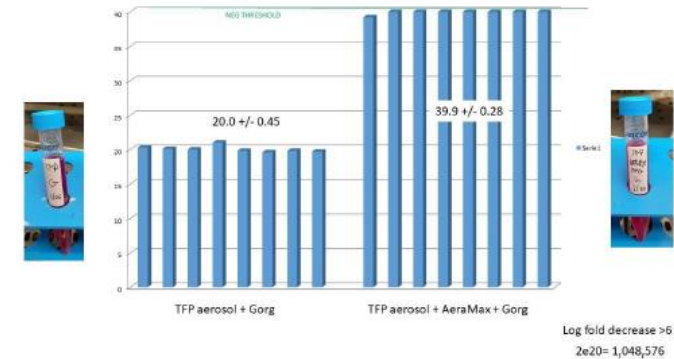


## Résumé du test



UNIVERSITA' DEGLI STUDI DI GENOVA  
DIPARTIMENTO DI MEDICINA SPERIMENTALE

<b>Product description</b>	Fellowes AeraMax Professional AMS
<b>Settings</b>	Manual mode, speed 5, ionizer OFF
<b>Manufacturer</b>	Fellowes
<b>Type of test</b>	Experimental study on the effectiveness of an air purifier for confined environments (Fellowes AeraMax Professional™) in neutralizing the contagiousness of the SARS-CoV-2 virus
<b>Methodology</b>	Producing a viral aerosol, passing the viral aerosol through the purifier, collecting samples and evaluating the infectious viral load by cell culture and molecular PCR analysis



### RESULTS

This experiment demonstrates that the Fellowes AeraMax Pro AM 3 air purifier was able to completely neutralize the airborne viral load of SARS-CoV-2. In the experiment, the value of the PCR cycle turned negative compared to the non-purified sample, which had a value of 20.

Therefore, the Fellowes AeraMax Pro AM 3 air purifier is able to eliminate 99.9999% of the aerosolized SARS-CoV-2, with the air passing through the purifier a single time.

Genoa 07/23/2021

Prof. A. Izzotti, MD PhD,

Full Professor of Hygiene and Preventive Medicine, School of Medicine, Department of Experimental Medicine, University of Genoa


Prof. ALBERTO IZZOTTI  
MEDICO CHIRURGO  
19711494



# Accréditations du laboratoire de l'Université de Gênes

Les certificats ISO pour IAF 37 et 38 qui indiquent l'accréditation pour les instructions, pour la santé et les soins.

En complément, ce laboratoire fait partie d'un centre universitaire de diagnostic et de recherche. Le laboratoire est de classe BSL 3 permettant d'effectuer ces tests et les certifications, conformément aux règles du Service sanitaire italien (ISS).



**CERTIFICATO N. OHS-4459**  
**CERTIFICATE No.**

Si certifica che il Sistema di Gestione della Sicurezza e della Salute sul luogo di lavoro è  
it is hereby certified that the Occupational Health and Safety Management System of

**IRCCS OSPEDALE POLICLINICO SAN MARTINO**

LARGO ROSANNA BENZI 10 16132 GENOVA (GE) ITALIA  
nelle seguenti unità operative / in the following operational units

LARGO ROSANNA BENZI 10 16132 Genova (GE) ITALIA

e conforme alla norma / is in compliance with the standard  
**ISO 45001:2018**  
per le seguenti attività / for the following activities




SVILUPPO ED EROGAZIONE DI SERVIZI DI DIAGNOSI E CURA IN REGIME AMBULATORIALE ORDINARIO ED IN URGENZA. ATTIVITA' DI RICERCA IN AMBITO ONCOLOGICO ED UNIVERSITARIO. PROGETTAZIONE ED EROGAZIONE DI ATTIVITA' FORMATIVE.

DEVELOPMENT AND PROVISION OF DIAGNOSTIC AND CARE SERVICES IN ORDINARY OUTPATIENT REGIME AND IN URGENCY. RESEARCH ACTIVITIES IN THE ONCOLOGICAL AND UNIVERSITY FIELD. DESIGN AND DELIVERY OF TRAINING ACTIVITIES.

La validità del presente certificato è subordinata a sorveglianza periodica annuale / annually and to a complete review, every three years, of the management system.  
L'uso e la validità del presente certificato sono soggetti al rispetto del documento RINA. Regolamento per la Certificazione di Sistemi di Gestione per la Qualità.  
The use and validity of this certificate are subject to compliance with the RINA document: Rules for the Certification of Quality Management Systems.


Prima emissione / First issue	25.08.2021	Organizzazione con sistema di gestione certificato da / Organization with Management System certified since:	13
Data scadenza / Expiry Date	12.10.2021	Revisione / Revision date	25.08.2021

Jacopo Ferrando  
Genoa & Milan Management System Certification, Head

SCR N° 003 F  
RINA Services S.p.A.  
Via Corsica 12 - 16129 Genova Italy

CISQ è la Federazione Italiana di Organismi di Certificazione del sistema di gestione secondo ISO 9001 e ISO 14001.  
CISQ is the Italian Federation of management system Certification Bodies.



**CERTIFICATO N. 41781/21/S**  
**CERTIFICATE No.**

SI CERTIFICA CHE IL SISTEMA DI GESTIONE PER LA QUALITÀ DI  
IT IS HEREBY CERTIFIED THAT THE QUALITY MANAGEMENT SYSTEM OF

**IRCCS OSPEDALE POLICLINICO SAN MARTINO**

LARGO ROSANNA BENZI 10 16132 GENOVA (GE) ITALIA  
NELLE SEGUENTI UNITÀ OPERATIVE / IN THE FOLLOWING OPERATIONAL UNITS

LARGO ROSANNA BENZI 10 16132 Genova (GE) ITALIA

E CONFORME ALLA NORMA / IS IN COMPLIANCE WITH THE STANDARD  
**ISO 9001:2015**

PER I SEGUENTI CAMPI DI ATTIVITÀ / FOR THE FOLLOWING FIELD(S) OF ACTIVITIES




SVILUPPO ED EROGAZIONE DI SERVIZI DI DIAGNOSI E CURA IN REGIME AMBULATORIALE ORDINARIO ED IN URGENZA. ATTIVITA' DI RICERCA IN AMBITO ONCOLOGICO ED UNIVERSITARIO. PROGETTAZIONE ED EROGAZIONE DI ATTIVITA' FORMATIVE.

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Prima emissione / First issue	25.08.2021	Organizzazione con sistema di gestione certificato da / Organization with Management System certified since:	28/12/2012
Data scadenza / Expiry Date	26.12.2021	Revisione / Revision date	25.08.2021


Jacopo Ferrando  
Genoa & Milan Management System Certification, Head


SSQ N° 002 A  
RINA Services S.p.A.  
Via Corsica 12 - 16129 Genova Italy

CISQ è la Federazione Italiana di Organismi di Certificazione del sistema di gestione secondo ISO 9001 e ISO 14001.  
CISQ is the Italian Federation of management system Certification Bodies.

## BSL3 (WITH RISK-BASED ENHANCEMENTS)



**AIR TIGHT (WHEN DISINFECTING)**



**AIR TIGHT (WHEN DISINFECTING)**

**BSL3**

- 1 self-closing, double-door access
- 2 controlled access
- 3 personal shower out
- 4 sharp hazards warning policy
- 5 hand washing sink
- 6 sealed penetrations
- 7 physical containment device
- 8 powered air purifying respirator
- 9 laboratory bench
- 10 autoclave
- 11 exhaust HEPA filter
- 12 effluent decontamination system