

SUMMARY DOCUMENT



"The efficiency and effectiveness of ReSPR™ technologies - PPE SeLF, has been verified and validated"

ReSPR Technologies

www.resprtech.com

Comparison of PPE (Personal Protective Equipment) efficacy:

- **SeLF by ReSPR™ technologies**
- **Surgical mask**
- **FPP2 Mask**

October 2021

DEDALO laboratory of chemical testing and medicine accredited UNI CEI EN ISO 17025:2018 - ACCREDIA n° 0996

Arzignano - VI (IT)

The study shows that the electric wind (or *ionic wind*) technology generated by ReSPR™ technologies - PPE **SeLF** - **has the same ability to break down the number of breathable pathogenic particles just like the surgical mask and slightly better than the FPP2 mask.**

By now everyone knows how important it is to reduce the number of pathogens breathed, especially indoors: environments now "famous" for the risk of spreading germs and infections. Groups of people crowded in small spaces, ventilation systems that help spread the aerosol throughout the structure, are the main sources of contamination.

During the COVID-19 pandemic we have raised the focus on the air we breathe. The authorities were the first to start looking for new ways and better methods to prevent the disease, imposing emergency rules and behaviors from the beginning, first of all the use of PPE (*Personal Protective Equipment*) of the respiratory tract: masks

Fortunately, new technologies for health protection have emerged, such as those put on the market by the American company ReSPR™ technologies, to offer continuous protection of the breathing zone in an indoor environment, precisely in the presence of people



The technology adopted by **ReSPR™ technologies - PPE SeLF** - uses a proprietary natural process based on studies of electric wind (*ionic wind*), capable of generating a powerful flow of ions pushed with force in front of the breathing zone.

The Swiss company **New Wave Project SA**, an official distributor of ReSPR™ technologies, has worked with **DEDALO**, an important chemical and medical testing laboratory, **accredited UNI CEI EN ISO 17025:2018 - ACCREDIA n° 0996**, to test and demonstrate the real effectiveness of ReSPR™ technologies PPE SeLF in breaking down pathogens from the breathing zone. With the same aim, the comparative efficacy with other universally widespread PPE was tested: surgical masks and FPP2. The tests were organized in the laboratory.

Never has so much attention been paid to finding the safest and most effective ways to protect the breathing area.

The tests have previously analyzed the ambient air, to identify the pathogenic bacterial load, and then carry out the tests.

The PPEs were tested, according to the UNI EN13098: 2019 procedures, simulating the actual respiratory act, accounting for the amount of pathogenic load killed by the 3 PPE, under the same conditions.

"The overall reductions in microbial load from the breathing zone are the same among the PPE tested:

- SeLF
- Surgical mask
- FFP2 mask "

Results & Conclusions

The tests have clearly shown an almost equal reduced concentration of pathogenic bacterial load "breathed" by the PPE tested. **This validates the sanitizing effectiveness of ReSPR™ technologies PPE SeLF, in real conditions.**

The overall reductions in the pathogenic load varies from -85.5% to -93.2% compared to the pathogenic load present in the ambient air. The figure below shows the tests with official data.

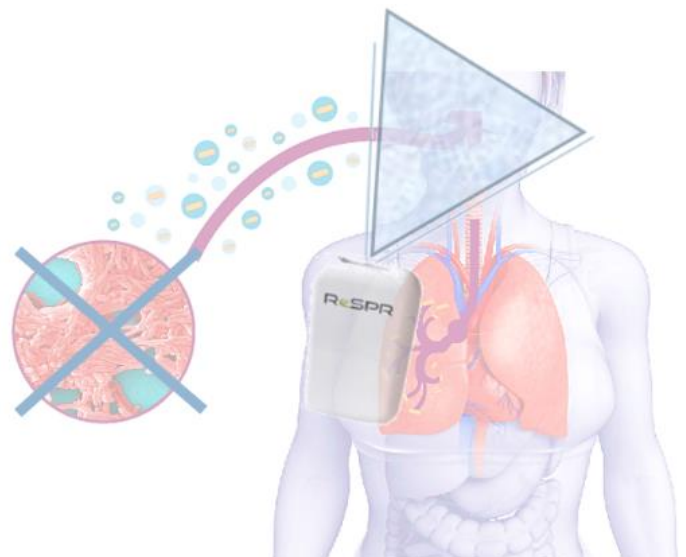
Given the successful and significant reduction of the respirable pathogenic bacterial load using the PPE SeLF, at least equal to the use of PPE surgical mask and FFP2 type approved by the International Authorities, the report concluded that these results **can significantly reduce the risk of breathing pathogenic charges indoors, even in the presence of people: they can represent an advantage for the health and well-being of those who, wearing SeLF PPE, frequent these environments"**

This test highlights great news for all those looking for an innovative and better PPE product, easier to use, manage, maintain, safe and easy, to protect their breathing area from disease-causing pathogens.

FIRST TEST SeLF of ReSPR™ technologies logo NASA – 11.11.2020								
Summary of analytical results								
ID	REPORT	Position	Sampling time minutes	Litres withdrawn	CBT 37° C UFC/m ³ h		MOULDS UFC/m ³ h	
					count	MAX	count	MAX
1	20LA05036	Environmental baseline	10,0	1.000	> 300	< 75	> 300	< 75
2	20LA05039	SeLF activated	10,0	1.000	10	< 75	0	< 75
		RESULT			excellent		excellent	

SECOND TEST SeLF of ReSPR™ technologies logo NASA – 01.10.2021 / 06.10.2021								
Summary of analytical results according to UNI EN 13098:2019								
ID	REPORT	Position	Sampling time minutes	Litres taken at temperature 24°C	Aerobic mesophilic microorganisms 30° C UFC/m ³		Psychrophilic bacterial load in air a 22°C UFC/m ³ h	
					count	MAX	count	MAX
3	21LA04491	baseline relative the test environment	10,0	1.000	>75	< 75	>75	< 75
4	21LA04492	Surgical mask	10,0	1.000	< 10	< 75	< 10	< 75
5	21LA04493	Mask type FFP2	10,0	1.000	13	< 75	< 10	< 75
6	21LA04552	PPE SeLF of ReSPR	60,0	Rif. a 1.000	< 10	< 75	< 10	< 75
		RESULT			EXCELLENT		EXCELLENT	

Test DEDALO laboratories accredited UNI CEI EN ISO 17025: 2018 - ACCREDIA n° 0996



Source

"New Wave Project SA"

Test DEDALO – PPE comparison

November 2020 - October 2021