



mpg.

molecular plasma group

Pandemic problem with face masks and PPE

- Accidental contamination by touching protective equipment exposed to virus
- PPE has to be changed often because of contamination





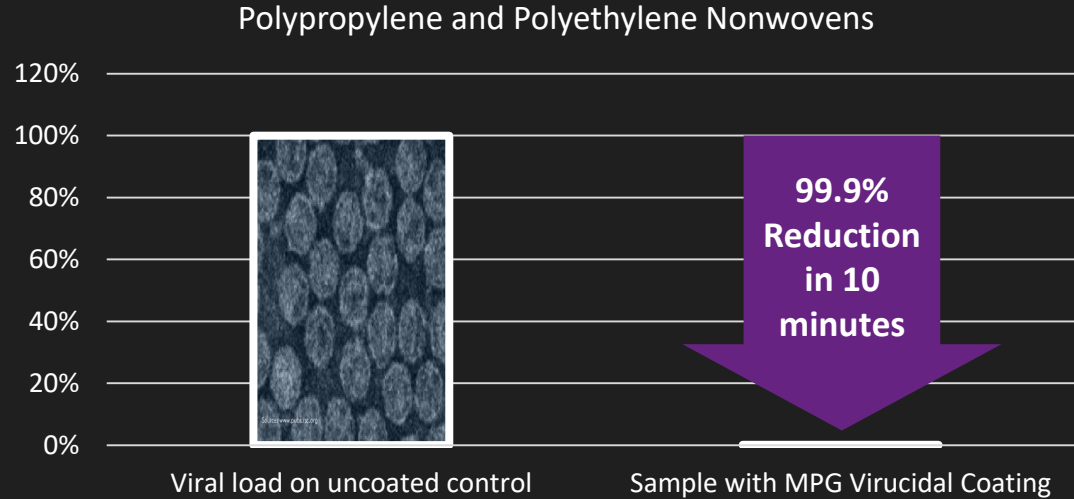
Innovative solution:

MPG's Self-Disinfecting

surface treatment

reduces contamination risk and
increases trust in the PPE

MPG's Virucidal coating reduces risk

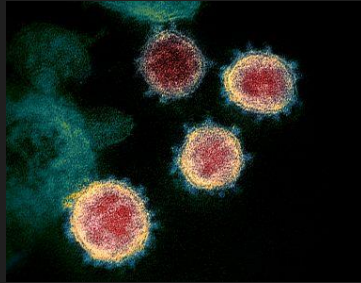


Virucidal Effectiveness Data

- Molecular Plasma coated polyethylene and polypropylene nonwovens
- Antimicrobial substances approved by FDA and EU ECHA
- Reached Limit Of Quantification after 10 minutes of contact
- Less than 10 mg of additive per mask, bonded to the surface
- Using a dry, low energy, low footprint atmospheric cold plasma process

Note: Final documentation pending results of ongoing studies, expected by end of 2020

Supported by Experts



- Work started with Luxembourg Institute of Health to demonstrate effectiveness against SARS-COV-2
- Experienced virologist team developing specific protocol for testing virucidal coated nonwoven on in their biosafety level 3 laboratory
- Dr. Markus Ollert, Director of Infection and Immunity department, confirmed his opinion about contribution to the protection of health care workers



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RESEARCH DEDICATED TO LIFE

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MPG – Molecular Plasma Group
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Esch-sur-Alzette, September 24th, 2020

Letter of Support

To whom it may concern,

As the Director of the Department of Infection and Immunity at the Luxembourg Institute of Health (LIH), I am fully informed about Molecular Plasma Group's (MPG) plasma technology in non single-use face masks and protective personal equipment (PPE) with a virucidal coating.

My department at the Luxembourg Institute of Health (LIH) is working closely with MPG to demonstrate effectiveness specifically against SARS-CoV-2, following the development work that was done by MPG and the Luxembourg Institute of Science and Technology (LIST) to get to an effective virucidal effect against test viruses. The evaluation of the MPG technology in the context of COVID-19 is currently being performed in the biosafety level-3 (BSL-3) laboratories of the LIH by experienced virologists at the House of BioHealth in Esch-sur-Alzette.

It is my opinion that the addition of such virucidal features, as developed by MPG, to face masks and PPE textiles will significantly contribute to the protection of health care workers as well as the public in general and represents a unique, pragmatic and important solution in the current pandemic.

Yours sincerely,

Markus W. Ollert, MD
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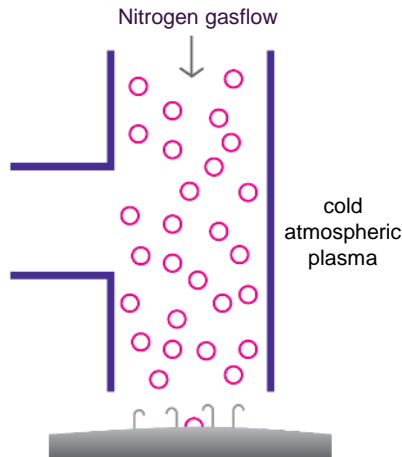
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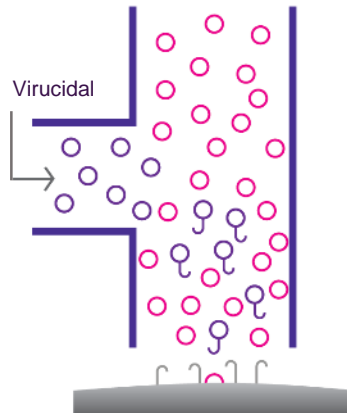
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How does molecular plasma coating work?

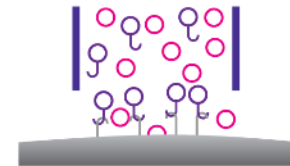
1.



2.



3.



- Dry, solvent free
- Economical
- Stable and effective

Environment – intrinsically green



Low energy



No solvents



Less chemicals ⁽¹⁾



= Same effect

⁽¹⁾ Less than 0.1 g/m² of additive covalently bonded to the surface

Increased Safety with MPG Virucidal Coating

- Coating on the **outer layer** of single use face masks and PPE
- Does not change **breathability**
- Natural, **non toxic**, widely used, environmentally friendly virucidal
- Using an innovative **simple**, reliable and safe technology
- **Documented** results will be available for CE certification support



Why wear masks with virucidal coating?

- People who are exposed to pathogens
- Wearing single use face masks with virucidal coating
- Extra protection to break the contamination chain
- Can have peace of mind with less risks
- Valid for professionals and general public



Who is it for?

Virucidal coating is for:

- Local manufacturers of
- Single use devices and protective equipment
- Who want to differentiate
- and BE THE FIRST



MPG roll-to-roll Plasmaline™ machine

Plasmaline™ options:

- Standard plug-and-play version
- Wider multiple roll feed for higher capacity
- UV vision system for 100% inspection



Be the first in your region

Contact MPG for access to manufacturers of coated PPE
or

1. Plan a test for your product under NDA
2. Book a prototype production of coated fabrics
3. See it working on your own product



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