

March 22, 2021



## Viroblock Frequently Asked Questions

### What is Viroblock?

- Viroblock is a patent pending additive chemical product manufactured by HeiQ which when incorporated into coatings provides antimicrobial/ antiviral protection to coated surfaces. In the US Viroblock is referred to “V-Block”

### Who is HeiQ?

- HeiQ is a Swiss company which manufactures antimicrobial / antiviral additive products for multiple industries including textiles. Founded in 2005 from the Swiss Institute of technology. [www.heiq.com](http://www.heiq.com)

### How does HeiQ Viroblock work?

- HeiQ Viroblock NPJ03 is a unique combination of HeiQ **registered silver technology** for antiviral and antibacterial effect and HeiQ **vesicle technology** as a booster.
- The silver technology attracts the oppositely charged viruses and binds permanently to their sulphur groups. Subsequently, the fatty spherical vesicle technology (Liposomes) helps to deplete the viral membrane of its cholesterol content in minutes. Therefore, the silver can destroy the virus rapidly.

### What Claims can be made about efficacy of product?

- Depending on country being sold in, antiviral claims can be made. Currently in the US, only antimicrobial claims can be made according to the EPA. ICP will be working with HeiQ to register the product with EPA to then make efficacy claims against viruses including Covid-19.

### What is the advantage of Viroblock over other antimicrobial products?

- Viroblock’s two-part technology (silver & vesicle) system attacks bacteria & virus eliminating them in minutes (99.95%) rather than hours like other competitors in the market (77.4% in 24 hours).

### When was Viroblock developed?

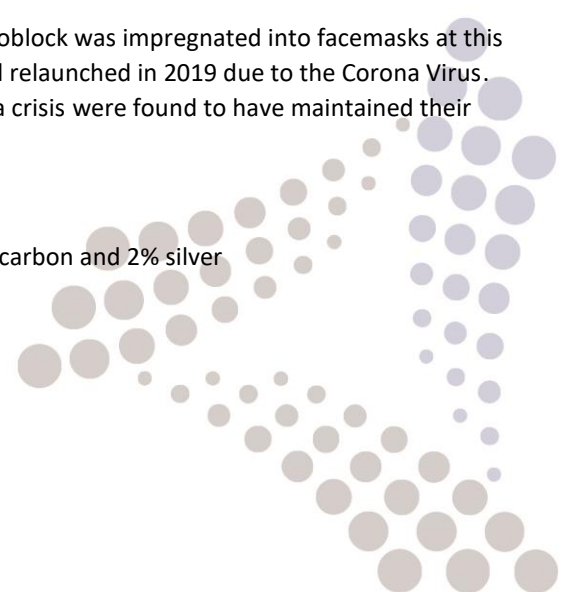
- Viroblock was developed in 2014 during the Ebola crisis (2014-2016). Viroblock was impregnated into facemasks at this time. The technology was subsequently shelved and forgotten about and relaunched in 2019 due to the Corona Virus. Seven years later masks containing Viroblock manufactured for the Ebola crisis were found to have maintained their efficacy.

### What is Viroblock made from?

- Viroblock is 100% cosmetic grade consisting of 72% BIO base, 26% hydrocarbon and 2% silver

### Where is Viroblock manufactured?

- Viroblock is manufactured by HeiQ Switzerland, USA and Australia



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**Has any testing been undertaken regarding the effectiveness of the treatment against Covid -19?**

- COVID-19 is the name of the disease caused by the virus SARS-CoV-2.
- Tests have been conducted by HeiQ with the Peter Doherty Institute for Infection and Immunity in Melbourne, Australia (Doherty Institute). While it is neither a medicine nor a vaccine, therefore should in no way claim efficacy against the disease, HeiQ Viroblock NPJ03 treated products have been tested effective against the SARS-CoV-2 virus. Tests conducted by an independent institute showed that treated product achieved 99.99% reduction of the virus after a few minutes.
- The Viroblock technology has also been tested against the human coronavirus 229E, Influenza types H1N1, H5N1, H7N9, and Respiratory Syncytial Virus (RSV) and demonstrated significantly improved reduction of virus infectivity.

**Can it be put into all coating types?**

- Currently successful in Water Based technology, Energy curing in the final stages of development

**Can coatings containing Viroblock be used on Low Migration Food Packaging?**

- Yes, Viroblock is approved for food contact applications and is dermatologically tested. (This needs investigating for the USA with the FDA)

**Does Viroblock have any impact on recyclability, composability of the printed product?**

- No as it is cosmetic grade it has no impact on these processes.

**What is the recommended coating thickness?**

- Standard print coat weights provide efficacy provided the coating layer remains homogenous and is not destroyed.

**How long is the exclusivity agreement between ICP / HeiQ and what countries does it cover?**

- The agreement is global exclusivity for 5 years.

