



Instituto Valenciano de Microbiología

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Determination of antiviral activity of textile products with “NanosTextile” against Coronavirus 229E (ISO 18184: 2019 and NF EN 14476: 2013 + A2: 2019 Standards)

Report

Registration No.: D/21/V0520.

1. **Laboratory identification** Instituto Valenciano de Microbiología.
2. **Client identification** Nanostech LLC.
 Address USA
3. **Sample identification** (information provided by the client)
 - Product name **NanosTextile.**
 - Batch number 1.
 - Expiration date 01-2022.
 - Manufacturer (supplier) NanosTech LLC and NanoMetric solutions LLC.
 - Storing conditions Room temperature.
 - Description of the product Teatred textile (fabric) with oxide nanoparticles.
 - Active substance(s) and its concentration(s) Nanomaterials in textile finishing.
 - Time(s) of contact ordered for the assay 0 to 8 hours.

IVAMI is not responsible for client-supplied information.

10. Conclusion

The product “**NanosTextile**”, batch 1, after a time of contact of 8 hours, ordered by the client, shows antiviral activity value of $Mv = \geq 5.80 \pm 0.38$ and a **reduction percentage $\geq 99.99\%$** against Coronavirus 229E, with respect to the control samples immediate after inoculation, when the activity is evaluated according with the internal procedure DESIN-5518, based on the **ISO 18184: 2019** and **NF EN 14476: 2013 + A2: 2019** Standards.

The antiviral activity value (Mv) is higher than 3, it can therefore be concluded that the product “**NanosTextile**”, batch 1, **shows an excellent antiviral effect** against Coronavirus 229E (ATCC VR-740) when the activity is evaluated according with the internal procedure DESIN-5518, based on the **ISO 18184: 2019** and **NF EN 14476: 2013 + A2: 2019** Standards.

Note 1: The results obtained correspond to the sample received in this laboratory.

Note 2: The information that depend on the information received from the client and are not facilitated by the same one, shown as "not indicated".

Bétera (Valencia), November 8, 2021.

Signed. Miguel Ángel Fernández.
Responsible technician

Signed. Encarnación Esteban.
Technical Director

References

- **ISO 18184: 2019**. Textiles - Determination of antiviral activity of textile products.
- **NF EN 14476: 2013 + A2: 2019** Standard. Chemical disinfectants and antiseptics. Quantitative suspension test for the evaluation of virucidal activity in the medical area. Test method and requirements (phase 2/step1). AFNOR.