THINCR

## Multilayer face masks with virucidal/germicidal filter

Virucidal coated Filter of reusable sanitizable mask



N95 mask with additional virucidal coated filter layer



Disposable mask with virucidal coated Filter layer



- The virucidal coated layer can be used to manufacture various types of masks (Above Photos are of actual products)
- The mask filter tested for pressure drop, Bacterial filtration efficiency which is well within acceptable range, Also tested for bactericidal activity
- The additional virucidal coated layer in the N95 mask and simple cloth mask make it functionally more efficient
- The multilayer reusable filter is also developed using 3D printing principle, therefore fits accurately & tightly in reusable mask cover



Technology Development Board supports M/s Thincr Technologies India Pvt. Ltd, Pune

for Commercialisation of

Development of low cost and more efficient masks coated with antiviral agents to protect spread and protection of Covid 19 and other viral infections

08 07 **PROJECT SECTOR:** Covid Proposal

**CATEGORY:** Mask





TDB has approved financial support to M/s Thincr Technologies India Pvt. Ltd, Pune for "Development of low cost and more efficient masks coated with antiviral agents to protect spread and protection of Covid 19 and other viral infections" through an agreement signed on 8th July 2020. The company has submitted an application in response to its invitation for proposals for technologically innovative solutions towards fighting COVID-19.

The company is involved in the coating and 3D printing of antiviral agents on the masks as a preventive measure against COVID-19. Sodium Olefin Sulfonate based mixture is used as a coating on the mask. Sodium olefin sulfonate which is a soap forming agent has hydrophilic and hydrophobic properties when come in contact with enveloped viruses, it disrupts the outer membrane of the latter. The ingredients used as the coating agent are stable at room temperature and are widely used in cosmetics.

