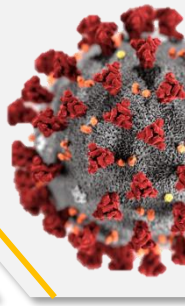
Liquid Guard for Surface Protection Against COVID 19



INTRODUCTION

Liquid Guard® is a type of glass coating surface protection. It is claimed to repel liquids and dirt, prevent micro scratches, as well as having an antimicrobial function. It is applied through either a wet wipe or direct spray. Liquid Guard® is a product of Care Deutschland AG and is available in Europe and Latin America. It was a winner of the 2019 German Innovation Award in Excellence in Business to Business; Materials & Surfaces category. It is registered with EU Biocidal Products Regulation for PT 2 (disinfectants and algaecides not intended for direct application to humans or animals) and PT 9 (fibre, leather, rubber and polymerised materials preservatives).

HOW IT WORKS

It is claimed that Liquid Guard® utilises modified silica which creates a non-migrating antimicrobial glass layer on surfaces and delivers permanent antimicrobial function. Firstly, the surface needs to be cleaned and polymerised. An activating wipe of spray is then applied to activate the polymer layer, so it became antimicrobial. The surface should then be buffed and/or polished using a microfiber wipe/cloth, and the coating should be ready for use in six hours. Liquid Guard® claimed to function by providing a physical elimination of microorganisms with its positively charged nitrogen ions which will attract and destroy the negatively charged cell membranes. The surfaces that it can work on include glass, ceramics, oxidation resistant metals, plastics, varnishes and printed cardboards and wrappings. It is not compatible with surfaces in contact with foods and water-sensitive surfaces.[1]

EVIDENCE ON EFFECTIVENESS AND SAFETY

There was no retrievable evidence from the scientific databases such as Medline, EBM Reviews, via OVID, PubMed or peer reviewed journals that directly investigated the efficacy and safety of Liquid Guard®. Two laboratory testings of virucidal activity of test specimens equipped with Liquid Guard® were available. The first report on testing using Influenza A virus showed virus reduction of approximately 1 log (corresponding to 90%) between test and control specimens at eight hours. After 24 hours the virus reduction reached approximately 2 log (corresponding to a reduction of approximately 99%).[2] Another test was conducted using Transmissable Gastroenteritis Virus of Swine (TGEV-coronavirus) as the model virus for SARS-CoV. A virus reduction of 0.97 log was recorded after one hour (corresponding to 90% of inactivation) and 2.7 log after eight hours (corresponding to 99.8% of inactivation).[3] The product technical data and analysis caution on possibility of respiratory irritation in excessive exposure to spray mist, skin and eye irritation if in contact and possible abdominal discomfort, nausea/vomiting and diarrhoea in case of ingestion.[3]

CONCLUSION

There was no evidence retrieved from scientific databases on the effectiveness, safety and cost-effectiveness of Liquid Guard® against Covid-19 or in reducing the frequencies of disinfection and sanitisation.

REFERENCE

1. Liquid Guard® Permanent Antimicrobial Protection: Technical Data and Analysis. (Report submitted by company).

2. Eurovir Hygiene-Labor GmbH. Testing the virucidal activity of “Liquid Guard”. Short report: screening test S1. January 2020. (Report submitted by company).

3. Eurovir Hygiene-Labor GmbH. Testing the virucidal activity of “Liquid Guard”. Short report: screening test S2. March 2020. (Report submitted by company).

Based on available evidence up to 9 April 2020

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Disclaimer: This rapid assessment was prepared to provide urgent evidence-based input during COVID-19 pandemic. The report is prepared based on information available at the time of research and a limited literature. It is not a definitive statement on the safety, effectiveness or cost effectiveness of the health technology covered. Additionally, other relevant scientific findings may have been reported since completion of this report.

Malaysian Health Technology Assessment Section (MaHTAS),
Medical Development Division,
Ministry of Health, Malaysia.