

Premise

This report describes the results of a study conducted by 3A Laboratories on glass-ceramic substrates coated with PhotoACTIVE® Ag, Code PA-Q07-H2O-Ag, Lot 200827, produced on 27/08/2020, expiry 27/08/2022, firm with the management of the Quality System, in compliance with the requirements of the UNI CEI EN ISO / IEC 17025: 2018 standard, Laboratory with management system certified UNI EN ISO 9001: 2015 by CSQA with n ° 14270, accredited ACCREDIA since 2011 with accreditation n ° 1165.

Normal antibacterial and antiviral disinfectants perform an immediate disinfection action but are labile over time or lose their effectiveness after a few hours.

In this study it will be shown that coating a substrate with PhotoACTIVE® Ag will have a benefit lasting more than one year.

Analyzes performed according to BS EN 1276/19

As established by the BS EN 1276/19 tests performed on PhotoACTIVE® Ag has had an excellent performance in the reduction of bacteriological loads.

The results are reported:

Test Method	Test Parameters	Test Suspension (lg)	Final Count (lg)	Bactericidal Effect (Log Reduction)	Specification Limit (lg)	Bactericidal Efficacy (%)
Quantitative suspension test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics (BS EN 1276:2019)	<i>Staphylococcus aureus</i> ATCC 6538	7.26	120	5.18	≥5	99.999
	<i>Escherichia coli</i> ATCC 10536	7.23	160	5.03		99.999
	<i>Pseudomonas aeruginosa</i> ATCC15442	7.27	1.0	6.27		99.999
	<i>Enterococcus hirae</i> ATCC 10541	7.25	140	5.10		99.999

This methodology identifies whether a bactericide is able to remove bacterial loads starting from a product analysis.

Results:

PhotoACTIVE® Ag has an antibacterial efficacy of 99.999% on the strains analyzed.