TECHNISCHE UNIVERSITÄT DRESDEN

Fakultät Mathematik und Naturwissenschaften, Fachrichtung Biologie, Institut für Mikrobiologie

# TEST REPORT

February 15th 2014

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| Research Institute: | Technische Universität Dresden<br>Faculty of Science; Department of Biology, Institute of Microbiology<br>Research Group: Applied Microbiology |
| Research group leader | Isolde Röske<br>Technische Universität Dresden<br>Prof. Isolde Röske<br>Institut für Mikrobiologie<br>Lehrstuhl für Angewandte Mikrobiologie<br>Prof. Dr. Isolde Röske<br>01062 Dresden<br>Telefon: (0351) 463 32905<br>Germany |
| Date of test: | April 18th 2011 |
| Test materials: | Hydrotect for Interior |
| Sampling:: | costumer |
| Test method and condition: | ISO 27447:2009 (modified), Test bacterium: *Pseudomonas aeruginosa*,<br>0.01 mW/cm$^2$ UV-A radiation, 4 hour incubation,<br>measurement of living cell counts by spread plate method with 100 µl sample volume |

Test results:

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| Type, size, shape of the test pieces | 5.7 x 5.7 x 0.5 cm |
| size of analyzed surface area | 4.0 x 4.0 cm |
| Removal method of organic substance | pre-exposition to UV-A light of 1 mW/cm$^2$ intensity for at least 24 hours |
| Temperature | room temperature |
| Manufacturer´s name and type of lamps and wavelength of peak radiation of black light blue fluorescens lamp | Narva Lichtquelle GmbH + Co. KG, Brandt-Erbisdorf, Deutschland, LT 18 W/009 UV, 360 nm |
| Manufacturer´s name, type of UV radiometer | Lutron Electronics GmbH, Berlin, Deutschland, UVA-365 |
| Test cell | petridish 12.0 x 12.0 x 1.5 cm covered with moisture preservation glass(Schott Borofloat® 33 [SCHOTT JENA$^{er}$ Glas GmbH, Jena, Deutschland]) |
| $R_{0.01}$ | 5.0 |
| $\Delta R$ | 0.1 |
| antibacterial properties | excellent under UV-A light (0.01 mW/cm$^2$) and in the dark |

------- End of Test Report -------

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