

Summary of Dutch Microfibre Report

The report largely confirms several points that have been highlighted elsewhere and is mostly in line with the ADM Microfibre report.

TNO, the institution that performed the testing, is a highly respected organisation in The Netherlands (<http://www.tno.nl/> -- click English flag). I believe TNO has carried out independent testing and verification on several occasions for Proctor & Gamble.

The document initially top-line summarizes what a microfibre is, how it is produced and how it works.

TNO has tested microfibre cloth (not mops) on the attributes below. ***The result that deviates from other tests so far, is the last one: hygienic properties.***

Cleaning performance

Overall, surfaces are cleaned faster with Microfibre cloths vs traditional methods. Chocolate stains on finished wood or desks are cleaned 2.5-4.5 times faster with Microfibre. Fingerprints on glass are cleaned 1.5-3 times faster. No difference was observed for fingerprint cleaning on finished wood or desks.

Microfibre cleaning is 2-2.5 times more effective in removing limescale stains vs traditional cleaning. *This is consistent with Medirest observations at Hinchingsbrooke and East Kent. In addition our experience is also that limescale build-up is considerably reduced (virtually nil) with consistent use of microfibre cloths only.*

Repeated washing cycles did not affect the cleaning performance.

Some of these differences may become smaller in reality as there is potential that the concentration of detergent in the traditional cleaning method is rather low (0.4%). The report doesn't specify what detergent is used, so again this might have some bearing. Thus the margin of error may be affected by using incorrect dosage or inappropriate chemicals vs cleaning with products at their recommended dosage and with the right product for the job.

Surface safety

Microfibre cleaning is not expected to be more damaging to hard surfaces. However, finished materials should not be cleaned while applying too much pressure on the cloth. Also, accumulation of small sharp soil should be avoided. Microfibre holds on to these soils more strongly and can therefore more easily damage a surface.

It is mentioned that microfibre cloths could be more damaging because the fibres penetrate pores deeper but because cleaning is finished quicker, the overall damaging effect is not expected to be any different vs traditional cleaning.

Obviously it is still early days to assess the impact of this over a period of prolonged use, we will continue to monitor this at Hinchinbrooke hospital

Repeated washing cycles did not affect the surface safety profile.

Pressure during cleaning and cleaning motions

Very limited pressure is needed on the cloth to achieve optimal cleaning.

A circular cleaning motion increases cleaning performance by 33%

Damp cleaning

Slight deviations in the % of water absorbed in the cloth do not affect the cleaning performance.

Influence of water hardness

No effect of water hardness on the cleaning performance could be observed, as long as the microfibre didn't absorb too much water. Increased streaking could only be seen at high water hardness if the cloth contained more than 60% of its own weight in water.

Use of cleaning chemicals

Cleaning with microfibre cloths (without detergent) goes faster than traditional cleaning with detergent. Adding detergent to the microfibre cloth did not affect its cleaning performance.

Skin damage

Microfibre cleaning is not seen as more damaging to the skin as conventional cleaning methods. Contact-eczema can be expected, but not to any greater frequency or risk than conventional cleaning.

Hygienic properties

Microfibre cleaning was not more efficient in removing micro-organisms vs. conventional cleaning. Even microfibre cloths that claimed to be "sanitising" were found to be equally effective in removing micro-organisms as conventional cleaning.

Repeated washing cycles did not change these properties.