

# Testing confirms: Extremely low microplastic shedding

Microplastic shedding is a gaining attention in environmental circles. To find out how much our products shed – in caseresearch eventually finds that this is harmful to the environment – we enlisted a reputable German research company to put our products to the test.

We've all seen the disturbing images of plastic garbage washing up on beaches around the world and lots of other human-generated trash being retrieved from the seven seas. Meanwhile, the issue of microplastic emissions has now become part of the general debate over plastic waste. This can make all of us wonder what impact our own lives have on the world's oceans and their inhabitants.

At Vikan, we think about this too. Are our products contributing in some way to the mess that humankind is making of our fragile planet? We wanted to find out, so that we could make changes in material design or corrections in our manufacturing processes if necessary.

So far, we haven't been able to find any research showing that microplastics actually harm fish in the world's oceans and other waterways. But to find out how much our products shed – in case this eventually proves to be harmful to the environment – we engaged the services of the Application Lab at Weber & Leucht GmbH, in Fulda, Germany. The Application Lab tested more than 100 products including six of our own microfibre cloths and mops for microplastic shedding during laundering.



Weber & Leucht came up with a formula to rate the phenomenon of microplastic shedding called the MLC Index, which is basically the amount of microparticle loss per cleaning cycle of one square metre of cleaning textile.

The lab simulated 100 washing cycles using an accelerated cleaning machine that washes, rinses, extracts shed material and dries in 30 minutes. Then Weber & Leucht applied three different analytical processes on the products.

- An REM-EDX analysis that identified and measured fibres and microplastics before and after washing
- An FT-IR (ATR method) test that identified and measured organic deposits, polymers and microplastics
- A thermal analysis that identified and measured polymers and analysed material stability.



## Doing your part to fight microplastic emissions is easy with Vikan!

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As we expected, the Vikan products did well under the extensive testing. Our marks on the MLC Index were as follows:

- A+ – Original microfiber cloth (zero emission)
- A+ – Lustre microfiber cloth (zero emission)
- A – DampDry 31 mop (low emission)
- A – Damp 48 mop (low emission)
- A – Damp 47 Dark mop (low emission)
- A – Damp 42 Dark mop (low emission)

Other results of the study indicated that non-woven materials result in the most loss (40%) and that knitted textiles shed the least material (1.5%) over time. And that the biggest impact on material emission is laundry detergent.

As you might expect, we were encouraged by the performance of Vikan's products in these tests. We really are concerned about protecting the Earth and its various ecosystems, and want to make sure that we as a company are doing everything we can in that regard.

To that end, we will be using the full results of the study as we design, develop and test future Vikan products.

The 'A+' marks mean that these Vikan products score equal to or better than 96% of all products tested, while our 'A' marks indicate performance in the 88th percentile. Even a 'B' mark means the product is in the top 25% of the products tested.

