

## ETSA POSITION PAPER

### The microplastic issue

The European Commission's Green Deal about moving towards climate-neutrality and speeding up the transition towards a circular economy requires an ambitious textile service strategy which tackles among others, the issue of microplastic<sup>1</sup>. This has been perceived as a *societal problem* facing individuals and companies in all countries, and in many sectors of our economies.

ETSA has acknowledged the Commission's objectives to tackle this issue and to set *up voluntary measures* to address it effectively in the near future. It should be noted however, that as a service provider, textile service is the last link in the chain, not the cause of microplastic emissions. The industry can certainly support the textile manufacturers who use polyester in their products in reducing the entry of microplastics from their products. In light of this, we strongly encourage the EU institutions to recognize the textile service industry' commitment in reducing microplastic pollution, and to consider our feedback of utmost importance.

### Microplastic and microfibers: the scientific approach

A lot of the particles released during the industrial washing are not necessarily considered plastic<sup>2</sup>. **The non-fibres consist of many different materials, while the fibre-shaped particles consist mainly of polyester.** The fibre-shaped particles, therefore, present an estimate of the number of microplastic particles with a best-case scenario where only 1% of the non-fibre particles are plastic and a worst-case where 5% is plastic.

Overall, the textile industry is responsible for only a tiny fraction of microplastic emissions<sup>3</sup>.

The textile value chain represented at ETSA allows a very important "knowledge sharing" that can help internal cooperation between **fabric and garment manufacturers, laundries and industrial plants**, as well as **customers**, fostering targeted discussions on how improving

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<sup>1</sup> Microplastics are solid synthetic-polymer-containing particles less than five millimetres in their longest dimension. For the purposes of this Opinion, unless otherwise stated, the term includes nanoplastics – i.e. particles up to 100 nanometres- *Group of Chief Scientific Advisors/Scient Opinion 6/2019 supported by SAPEA report No 4*

<sup>2</sup> Swedish Environmental Protection Agency by Brodin et al., 2018.

<sup>3</sup> For example, it is estimated that textiles create microplastic emissions of 76,8 grams per capita annually whilst tyre wear creates 1.228,5 grams per capita annually in Germany

<https://www.umsicht.fraunhofer.de/content/dam/umsicht/de/dokumente/publikationen/2018/kunsts-toffe-id-umwelt-konsortialstudie-mikroplastik.pdf>

sourcing and processes to reduce the risk of release of microplastic. The access to different data, processes and case studies could help the EU institutions and national debates to verify and confirm specific theories on how best eliminating microplastics.

## Eliminating microplastic particles: PROS & CONS

### Selection of textiles:

- Generally, textiles applied in textile service are high quality – high twist, tight weaving/knitting etc. – because they are intended to be used in dozens of washing cycles they consequently release relatively limited amounts of microfibrils<sup>4</sup>.
- The long lifetimes of the textiles and the number of washing cycles they undergo puts the peak of microplastic release in the first washing cycle after the textile production into perspective. The textile service companies may request documentation of release from the different textiles from the suppliers (applying a standard test) and assess feasibility to adjust certain processes
- The use of the product passport is to be promoted: the content of microplastic released during the first wash should become a mandatory attribute as well as the other parameters of sustainable development.

It should not be underestimated by the EU institutions that the textile chain is an innovative sector in which innovative and sustainable solutions are the focus of research and innovation. However, in the coming years it is unrealistic for a number of specific applications to completely ban polyester from textiles – there is no replacement. Certain release of synthetic microfibrils is therefore regrettably unavoidable. The issue may encourage to demand textiles free from synthetic fibres, which could clearly affect the business model of part of the textile value chain, so check and balances should be applied when encouraging certain changes in specific processes.

### Washing and drying processes:

- High use of tumble drying means efficient removal of microfibrils (lint) at this stage and consequently reduced release during the subsequent wash
- The laundries may optimise the washing and drying processes with the aim to reduce the release

As the bulk of microplastics is released in the first washing cycle, the textiles should be washed in specialised laundries before being placed onto the market.

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<sup>4</sup> Study by Hohenstein (2019)

In the set-up of voluntary initiatives and new regulations, it cannot be underestimated the role played by some detergents. The use of detergents free of microplastic may be encouraged. Labels like EU flower should be promoted.

### **Wastewater:**

- Unlike some sources of microplastics, such as car tyre wear, which is directly discharged into the environment, wastewater from textile services is sent to a treatment plant. According to current knowledge, well over 95% of microplastics are retained in wastewater treatment plants<sup>5</sup>. Due to the subsequent incineration of sewage sludge, a very high degree of fibre waste can be assumed not to be released into the eco system again. Sewage treatment plants could increase their performance even more with upgraded textile filters (e.g. stainless steel mesh, nonwovens) and increase their fibre abrasion removal rate to more than 99%.

## **ETSA Recommendations**

- **ETSA actively encourages internal discussions across its membership and raise awareness of best practices to prevent and diminish microplastic pollution**
- **ETSA contributes to high quality scientific exchange via webinars and targeted Working Groups**
- **ETSA strongly promotes policy and regulatory-drivers that are fed by the industry's contributions and supported by evidence-based studies.**

### **About ETSA**

ETSA is the leading European association for textile rental companies and national textile services associations. The overall market represented by our companies grew in recent years in almost every segment and product type. With over 135,000 employees in Europe, textile services represent a crucial industry, supplying hygienically cleaned workwear, linen and other textiles to the rest of the economy. Our textile service companies supply hospitals and nursing homes, hotels and restaurants, industries, trade, and crafts with hygienically clean textiles. Part of our services cover also production, distribution and industrial washing for personal protective equipment (PPE) which since Covid-19 pandemic have covered an even more important role.

More on ETSA [here](#).

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<sup>5</sup> When microplastics reach WWTPs they are mostly, though not completely, captured in one of the treatment steps and transferred to the sludge. ECHA estimates that primary treatment captures up to 80.5% of microplastics, secondary treatment up to 97.5% and tertiary treatment up to 99.7% (Figure 39)

<https://ec.europa.eu/environment/water/waterurbanwaste/pdf/UWWTD%20Evaluation%20SWD%20448-701%20web.pdf>