

Silicone softening agents reduce release of polyester microfibers (microplastic)

Textiles are one major source of microplastic release into the environment. By washing synthetic clothes mircrofibres are released during the process. Beside mechanical devices, which could reduce this release also silicone softening agent in fabric softener can contribute to lower the amount of microplastic.

Advantage

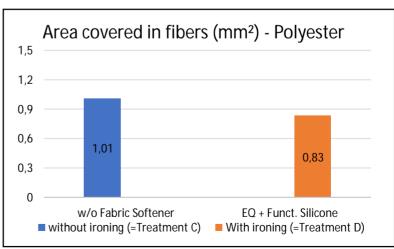
Reduction or microfibers / microplastic release into the environment

Experiment

- Polyester fabrics are treated with Fabric Conditioners formulations.
- Wash liquor containing powder detergent + polyester fabric treated at 60°C for 90min (together with steel balls).
- Fabrics are filtered afterwards with pure water.
- Wash liquor and rinse liquor are filtered. Microfibers on the filter are detected electronically.

Result: Less release of polyester microfibers by using a fabric conditioner including a functionalized silicone and ironing thereafter.





Contact:

Christof Brehm, S-C-E/WB, e-mail: Christof.brehm@wacker.com

Tel. +49 8677 / 83 - 3151