The Microfibre Consortium

Leading the textile industry in reducing microfibre release to protect our environment

Further Information on the TMC Test Method

Scope

This method is intended for determining the quantity of textile material losses from fabrics under standard conditions which reflect those found in domestic laundering.

Overview

A fabric specimen is laundered in a stainless steel canister with distilled or de-ionised water with appropriate conditions of temperature, time and mechanical action. The resultant wash liquor is then filtered through a glass fibre filter by means of vacuum filtration. The fibre release from the specimen is assessed by comparison of the mass before and after testing.

Method

The test specimens are prepared by cutting to the established dimensions, ensuring specimens are taken equally from warp and weft directions, as well as away from the cut edge of the fabric sample and the selvedge. Specimens edges are then hemmed, following established guidelines for width and corners, as well as seam and thread type.

Prior to testing, prepare the filters and specimen trays for each specimen, then place the dry hemmed specimens and specimen trays with filters in an oven or incubator at the specified temperature and duration. Record the dry mass.

Add specified water and steel balls to wash canisters and preheat in the prepared laundering device. After preheating, add one prepared specimen to each canister before running the laundering device for specified time and temperature.

Once complete, pour the wash liquor from each canister into a separate beaker. Rinse the canister, lid, seal, fabric specimen and steel balls, with all rinsed water also going into the beaker.

Filter the wash liquor through the prepared filter using the vacuum pump. Rinse the beaker and funnel with water then turn off the pump. Return filter to specimen tray and dry in an oven or incubator until dry. Record the mass measurements.

Results

Fibre release results are expressed as a percentage by mass.