

### Supplementary Information

#### Stainless-steel Sieves-technical remarks:

- The sieves were cleaned and weighted before starting the test.
- For measuring the pure weight of the sieves, they were kept one day before starting the test in the oven (at 105 °C) at least for 12 h and then weighted.
- Cleaning and transporting the sieves was done gently and carefully because the sieves are highly sensitive to even small pressures and sudden shocks.
- Before starting the test, plastic rubbers for all sieves and the ventilation aid for the sieves below 125 µm were installed.

#### Filter Papers-Technical Remarks:

- For measuring the pure weight of the filters, they were kept one day before starting the test in the oven (at 105 °C) at least for 12 h and then weighted.
- For the weighting of the filters, the scale from Precisa (Dietikon, Switzerland) was used.
- The filters were kept in the desiccator for at least 30 min after taking them out of the oven in order to remove the humidity from them.
- The filtration process was executed in situ as well.
- Using a specific sample for each filter should be an issue of concern so as to avoid contamination of the samples. So, each sample that was marked corresponds to its filter pore size.

#### Membrane Filter-Technical Remarks:

- For measuring the pure weight of the filter, it was kept one day before starting the test in the oven (at 105 °C) at least for 12 h and then weighted.
- For the weighting of the filters, the scale from Precisa (Dietikon, Switzerland) was used.
- The filtration process was applied in the lab.
- Normally, 20 mL of sample would be enough to have accurate results. The experiment showed that for amounts greater than 50 mL, the time of the test would greatly increase; at least half an hour was recorded.
- The test was not stopped until air bubbles were visible on the bottom of the filtration apparatus.

#### Sieving Machine-Technical Remarks:

- The amplitude of the vibration was selected at 1.00 Hz. According to the experience gathered, values higher than this amount lead to the misalignment of sieves from their original positions.
- One hour would be enough for the vibration.
- From time to time, it was checked that water did not flow out from the ventilation aids because it is a sign of the clogging of the sieves by filter cake.

#### Peristaltic Pump-Technical Remarks:

- The rotational speed of the pump was regulated to 1.5 rpm in order to have isokinetic suction of the wastewater.
  - Controlling for any leakage was performed from time to time for the inflow and out-flow hoses.
  - The rotatory machine was lubricated from time to time in order to prevent tearing of the hoses.
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Ultrasonic Machine -Technical Remarks:

- The washing time was limited to 30 min and the temperature to 60 °C.
- Before putting the sieves inside the machine, they were cleaned enough to be free of coarse particles.
- Prior to running the machine, the outflow valve was closed first. And then the sieves were put inside the machine. Afterward, it was filled out with water so that the upper edge of the sieves was covered with water. A small amount of detergent was poured directly onto the sieves in order to remove the remaining fats and lipids.
- After finishing the test, the machine was shut down to let the sieves cool for half an hour.