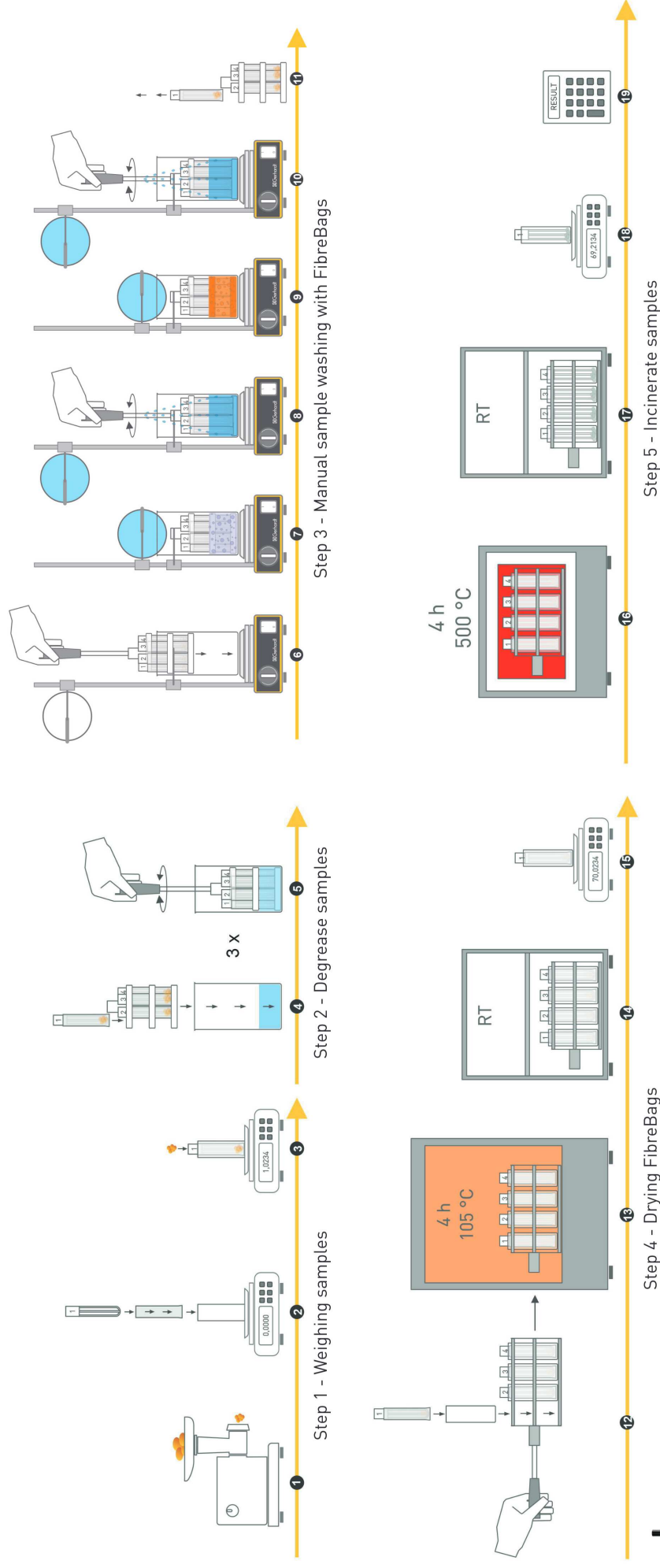


Manual fibre analysis using FibreBags



- Grinding and homogenising sample
- Place the glass spacer (No. 10-0124) into a FibreBag RF for crude fibre determination (No. 10-0128) and then place it in a crucible (No. 13-0048). Then tare the balance.
- Weigh approximately 1 g of the sample into FibreBag.
- If the fat content of the sample exceeds 5%, degreasing is recommended; from 10 % onwards, degreasing must be carried out. For the samples to be degreased, place them into the carousel of the degreasing module (No. 13-0045). Then add approx. 100 ml of petroleum ether 40/60 to a beaker.
- The sample carousel is immersed in petroleum ether. Degrease the sample by rotating the carousel and moving it up and down. This step is carried out a total of three times, always using fresh solvent. Then let it dry in the fume cupboard for about 2 minutes.
- The glass spacer with FibreBag are placed in the glass beaker of the FibreBag system and set on the hotplate. Adding anti-foaming solution (No.: 10-0143) prevents excessive foaming.
- Dissolution step 1:** Addition of sulphuric acid $c(\text{H}_2\text{SO}_4) = 0.13 \text{ mol/l}$ (1 x boil for 30 min).
- Washing step 1:** Take a new, empty beaker and wash the samples to remove any acid residues. To do this, rinse the carousel with several portions of hot water.
- Dissolution step 2:** Take a new, empty beaker and add potassium hydroxide solution $(\text{KOH}) = 0.23 \text{ mol/l}$ (1 x boil for 30 min).
- Washing step 2:** Take a new, empty beaker and wash the samples to remove any alkaline residue. To do this, rinse the carousel with several portions of hot water.
- Once the method is complete, transfer the glass spacer with the FibreBags back into the crucibles.
- Place the crucibles containing the FibreBags into the incineration module.
- Then place them in the drying oven at 103°C for 4 hours or leave them to dry overnight.
- Cool to room temperature (constant mass)
- Weigh the sample
- Place the ashing module in the muffle furnace and incinerate the sample at 500°C for 4 hours.
- Cool down to room temperature (constant mass)
- Weigh the crucibles
- Calculation