

TipOne® and autoclaving: Did you know?

Autoclaving is one of the routine tasks in most research laboratories. Every evening, the autoclave containers are filled with contaminated equipment. All this stuff need to be used at the next working day, but of course: completely aseptic! Often there are also our TipOne® racks in these containers. They are still perfect for re-use with our famous pipette tip refill system.

There are some instructions that have to be followed. Our TipOne® racks are made of Polypropylene (PP). With a maximum operating temperature between 125 °C and 130 °C during the process of autoclaving PP is stressed by a relatively strong physical burden.

To avoid deformation, no other things should be put on the top of the rack. We recommend to leave the wafer in the base, especially when autoclaving the large rack. Modern autoclaves provide different pre-defined sterilization programs. Select only programs with a maximum sterilization temperature of 121 °C. Set a vapor pressure of 1 bar. Autoclaving time should not exceed 20 minutes.

We suggest, not to place the racks close to the heating of the autoclave. The heating elements are often located on the wall or on the ground of the autoclave. This can lead to locally higher temperatures than specified by the manufacturer.

A closed lid has no negative influence on the sterilization. Narrow gaps between lid and base provide a sufficient vapor exchange. Additional tools to increase the gap dimensions are not required.

TipOne® filter tips are by default sterile. The filter is made of pure and highly efficient polyethylene. The filter material changes its pore structure during autoclaving. Therefore the filter tip cannot be used after this procedure. Starlab sterilizes all TipOne® filter tips by highly effective beta-radiation.

Advantage: The filter stays the same and the tips are completely sterile!