AUTOCLAVE GUIDE LINE

Container with screw tops or stoppers must be open during autoclaving to allow for pressure equalisation.
Autoclaving of a closed container will lead to the deformation or destruction of the container.
Plastic lab ware should be stood upright on a level surface during autoclaving to avoid shape deformation.
Plastic lab ware should not be laid on its side during autoclaving.
No mechanical stresses should be present during autoclaving.
For example, do not stack items.
Do not autoclave any container that contains residual contamination or even rinsing agent.
Not all plastics are resistant to steam sterilisation! For example, polycarbonate loses its tensile strength.
Mind the temperature limits for the plastics.
Autoclavable products are identified with a "121 °C" symbol in this catalogue.
The surfaces of some plastics can be attacked by chemicals present during autoclaving, which can cause persistent clouding. Some transparent plastics can absorb minute quantities of steam, which can lead to reversible clouding. This clouding disappears upon drying, which can be accelerated through the use of a drying oven.

Prior to autoclaving plastic lab ware, ensure that no soiling or residual contamination remains on the equipment. Otherwise, the residual contamination will bake on solidly during the autoclaving process. Even substances that have no effect on the plastic at room temperature can still lead to destruction of the plastic during the autoclaving process. Additionally, microorganisms might not be killed effectively if they are protected by the residual contamination.

NOTE: It is important to remove or loosen any caps before autoclaving bottles as the pressure difference can cause implosion

Can I Use a Polylab Plastic Beaker on an Electric Hotplate?

Not at all as the direct heat of any kind can and will deform, melt and ultimately damage the Beaker. This is especially important when using PTFE beakers. Although they can be used at temperature up to 260Â°C, PTFE is known to release fluorine gas at elevated temperatures.

Sterilization

Clean and rinse item with distilled water before autoclaving (121Â°C, 15 psig for 20 minutes). Certain chemicals which have no appreciable effect on resins at room temperature may cause deterioration at autoclaving temperatures.

ALWAYS COMPLETELY DISENGAGE THREADS BEFORE AUTOCLAVING.

Gas Ethylene oxide, formaldehyde.
Dry Heat 106Â°C for 120 minutes.
Disinfection Benzalkonium chloride, Formalin, Ethanol, etc.
Radiation gamma irradiated at 2.5 M rad. with unstabilized plastic.
+ Sterilizing reduces mechanical strength. Do not use PC vessels for vacuum application if they have been autoclaved.