

FACT SHEET

Autoclave Use - Compatible/Incompatible Materials

AUTOCLAVE-COMPATIBLE MATERIALS	AUTOCLAVE-INCOMPATIBLE MATERIALS
<ul style="list-style-type: none">• Tissue Culture Flasks• Surgical Instruments• Glassware• Pipette tips• Media Solutions• Animal food and bedding• Waste• Polypropylene (Secondary containers)• Stainless steel• Gloves	<ul style="list-style-type: none">• Acids, bases and organic solvent• Chlorides, sulphates• Seawater• Chlorine, hypochlorite, bleach• Non-stainless steel• Polystyrene(PS)• Polyethylene(PE)• Low density (LDPE) and High density polyethylene(HDPE)• Polyurethane

Never autoclave:

- Flammable, reactive, corrosive, toxic or radioactive materials
- Household bleach
- Any liquid in a sealed container.
- Any material contained in such a manner that it touches the interior surfaces of the autoclave.
- Paraffin-embedded tissue.

Glass

- Only Pyrex® or Type I borosilicate glass is autoclavable. When autoclaving liquids in Pyrex® containers, do not fill more than 2/3 full and do not seal the container.

Plastic

- Polypropylene is an inexpensive resin that can resist autoclave temperatures. Polypropylene containers are often used as secondary containers to hold materials that are autoclaved. Polycarbonate can also withstand high temperatures. Polystyrene (PS), polyvinyl chloride (PVC), nylon, acrylic, low-density polyethylene (LDPE), and high-density polyethylene (HDPE) lab ware and polyurethane tubing **are not** autoclavable under any conditions.

Gloves

- Gloves must be placed inside of an autoclavable biohazard bag and exposed to a steam setting; gloves will melt slightly but will not burn when autoclaved in this manner.

Stainless steel

- Most metals are designed for extreme conditions and are intended to be sterilized. Make sure to remove any plastics, liners and other items that may melt or combust.

Paper

- Paper is combustible and should not be placed directly inside an autoclave. It should be autoclaved in a waste bag on a biobag setting to prevent fire.

Media Solution

- No liquid should be sealed in a container and autoclaved. Fill 2/3 of the container and loosen caps. They should autoclaved in a steam producing cycle.

Pipette tips

- Most pipette tips are autoclavable. Some of these tips are plastic, some are **high density polyethylene**. In general, pipette tips should only enter the autoclave as waste inside of an approved biohazards bag and always sterilized on a steam-producing setting

Adapted from Princeton University Guidance