

Standard Operating Procedure (SOP) for Sterilising Shoof Plexiglas Syringes

Purpose:

This SOP outlines the procedure to sterilise Shoof Plexiglas syringes safely and effectively, ensuring sterility while preventing damage to the material.

Materials Required

1. Shoof Plexiglas syringes.
2. Mild, non-abrasive detergent.
3. Soft brush or sponge.
4. Clean, sterile pot for boiling.
5. Distilled or deionized water.
6. Clean tongs or gloves for handling sterile syringes.
7. Sterile drying area (e.g., clean tray covered with sterile gauze).

Procedure

Step 1: Cleaning the Syringes

1. Disassemble the syringe:
 - Remove the plunger and any detachable parts.
2. Rinse each part under warm running water to remove debris or residues.
3. Wash with a mild detergent:
 - Use a soft brush or sponge to clean both the interior and exterior surfaces.
 - Avoid abrasive cleaning tools that could scratch the Plexiglas.
4. Rinse Thoroughly:
 - Rinse all parts with distilled or deionized water to remove soap residues.

Step 2: Sterilisation by Boiling

1. Fill a clean, sterile pot with enough distilled or deionized water to fully submerge the syringe parts.
2. Place the pot on a stove or heating element and bring the water to a rolling boil.
3. Using clean tongs, carefully submerge the disassembled syringe parts into the boiling water.
4. Boil for 5-10 minutes:
 - Monitor the process to ensure the water remains at a rolling boil.
 - Do not exceed 10 minutes to prevent unnecessary stress on the Plexiglas material.
5. Remove the syringe parts using sterile tongs.

Step 3: Drying

1. Place the boiled parts on a sterile drying tray lined with sterile gauze or a lint-free cloth.
2. Allow the parts to air dry completely in a clean, dust-free environment.
3. Do not use cloth towels or materials that could introduce fibres or contaminants.

Step 4: Reassembly and Storage

1. Once completely dry, reassemble the syringe, ensuring all parts fit securely.
2. Store the sterilised syringes in a sterile, sealed container or pouch until use.

Precautions

1. Do not expose Plexiglas syringes to temperatures exceeding 130°C.
2. Do not autoclave.
3. Avoid using chemical sterilant or solvents like alcohol or acetone that may damage Plexiglas.
4. Inspect syringes for cracks or deformation before and after sterilisation. Discard damaged syringes immediately.
5. Ensure all equipment and handling tools (e.g., tongs) are sterilised before use.