Steps for Chemical Sterilization (Quick Guide)

Step 1

Decontaminate, clean, and thoroughly dry all instruments and other items to be sterilized. Water from wet items will dilute the chemical solution, thereby reducing its effectiveness.

Step 2

Prepare the glutaraldehyde-containing solution (or other chemical solution) by following the manufacturer's instructions--or use a solution that was prepared previously, as long as it is clear (not cloudy) and has not expired. After preparing the solution, put it in a clean container with a lid. Always mark the container with the date the solution was prepared and the date it expires.

Step 3

Open all hinged instruments and other items and disassemble those with sliding or multiple parts. The solution must contact all surfaces in order for sterilization to be achieved. Completely submerge all instruments and other items in the solution. All parts of the items should be under the surface of the solution. Place any bowls and containers upright, not upside-down, and fill with the solution.

Step 4

Follow the manufacturer's instructions regarding the time necessary for sterilization to be achieved. In general, if the solution contains glutaraldehyde, cover the container and allow the instruments and other items to soak for at least 10-12 hours. (Times vary for different products. Follow the manufacturer's instructions.) Do not add or remove any items to the solution once timing has begun.

Step 5

Remove the items from the solution using large, sterile pickups.

Step 6

Rinse thoroughly with sterile water to remove the residue that chemical sterilant leave on items. This residue is toxic to the skin and tissues.

Step 7

Store items properly. Proper storage is as important as the sterilization process itself. Place the items on a sterile tray or in a sterile container and allow to air-dry before use or storage. Use the items immediately or keep them in a covered, dry, sterile container and use within one week