



**MILLENNIUM  
SURGICAL**

**SURGICALINSTRUMENTS.COM**

UNMATCHED SERVICE · UNLIMITED INSTRUMENTS

822 Montgomery Ave #205  
Narberth, PA 19072  
(800) 600-0428

# Care and Cleaning of Cannulas / Silicone Items

IFU-2014.07.21

## STORAGE

Surgical instruments should be stored in sterilizing trays of proper size lined with soft silicone mats. Instruments should not touch each other. We recommend using protective tips made of soft silicone tubing of the proper size and thickness. Do not use rubber or plastic protective tips, which can melt during autoclaving and cause damage to instruments.

## INSPECTION

Be sure to inspect every instrument at the end of your surgical day. Please conduct this inspection under a microscope or with magnification lens.

NOTE: Silicone tubing and the Silicone Bulb do have a static cling affect with dirt and debris so it is very important to inspect them extremely close before and especially after cleaning is preformed.

Manual Cleaning. This method is **NOT RECOMMENDED** for cleaning.

Ultrasonic Cleaning. This is the only method recommended for cleaning Cannulas.

- Use only cleaning solutions approved for surgical instruments. Change the solution frequently, always use demineralized or distilled water. Heat water to 150° Fahrenheit (62 ° C) using an immersion heater, or in a separate stainless container, if your unit does not have an automatic built-in water heater. Be sure that you and your staff members are completely familiar with the manufacturer's instructions, which came with your ultrasonic cleaner.
- Make sure that "Sharp" and/or "Delicate" tips do not touch other instruments. All Cannulas must be fully submerged preferably with the Hub facing down. This is recommended because any debris that is in the Hub, this would increase the chance of this being removed. Do not place dissimilar metals (stainless, copper, chrome plated, etc.) in the same cleaning cycle.
- For Cannulas cleaning it is recommended to process a minimum of 10 minutes.
- It is also highly recommended that a Q-tip be used during and after the cleaning process to ensure that all fragments and/or dirt has been removed. If they are cleaned correctly they should be as clean as the outside of the hub with no signs of corrosion. If signs of corrosion becomes present the item is to be replaced.
- After removing instruments from the ultrasonic cleaner, rinse the instruments under running water first, and then with a syringe flush three times with clean demineralized water.
- When the cleaning of the Cannula is completed it is highly recommended to blow dry all water free from the hub and by NO means allow the water to dry by evaporation, that is what causes the inside to start corroding and most importantly water left in hub is still holding the dirt from the cleaning process that is why it is important to clean, flush thoroughly and then blow dry so no water is left trapped inside the hub or tube. That is why it is highly recommend using a hot air blower to thoroughly dry the instruments.

NOTE: Silicone tubing and the Silicone Bulb can be cleaned with the same guide lines as a Cannula described clearly above however silicone products do have a static cling affect with dirt and debris so it is very important to inspect them extremely close before and especially after cleaning is preformed. Because silicone has these characteristics as stated above I have also provided some recommendations for sterilization methods below.



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## LUBRICATION

Lubrication is not needed for Cannulas.

## INSTRUMENT STERILIZATION

Stainless Steel instruments can be sterilized via steam autoclaving, chemical disinfectants, ethylene oxide gas, or even dry hot air. Gas and dry chemical sterilization are the best methods for stainless steel instruments, but they take a lengthy time period to accomplish the desired result. The most practical method of sterilization is heat or steam, which require less time. However, these methods can be damaging to delicate stainless steel instruments. Use care when sterilizing your instruments. And, once again, be sure that you and your staff have read and fully understand the instructions supplied by the manufacturer of your particular sterilizer.

## SILICONE STERILIZATION

All Silicone Instruments should be placed in a sterilizing tray of proper size lined with soft silicone mats. The most practical method of sterilization is heat or steam, which require less time. Autoclave by one of the following methods but understand that these methods can be damaging to delicate stainless steel instruments. Use care when sterilizing your instruments. And, once again, be sure that you and your staff have read and fully understand the instructions supplied by the manufacturer of your particular sterilizer.

## STEAM:

High Speed Instrument Sterilizer - 10 minutes at 130° C (270° F) and 30 psi (2 kg/cm<sup>2</sup>)

Standard Gravity Sterilizer - 30 minutes at 121° C (250° F) and 15 psi (1 kg/cm<sup>2</sup>)

## RADIATION

Post-radiation testing of silicone elastomer reveals minimal physical property changes at 2.5 megarads exposure level, with tensile strength and elongation essentially unchanged. Minimal but measureable increases were seen in durometer and tensile modulus at 200% elongation. Such property changes are similar to those seen when the elastomer is subjected to additional oven post-curing.

## ETHYLENE OXIDE

This method is NOT RECOMMENDED for sterilizing Silicone.

**Warning: If this device is/was used in a patient with or suspected of having Creutzfeldt-Jakob Disease (CJD), the device cannot be reused and must be destroyed due to the inability to reprocess or sterilize to eliminate the risk of cross-contamination!**