

Instructions

General Warning

Using these instruments for other purpose than they are designed for, may lead to damages or failing of the instruments which may result in serious injury to patients or death. We are responsible for delivery of faulty instruments. The user, however, is responsible to check if the instrument has arrived intact of is fully functional for every use. Therefore please check every instrument before every use.

Tests :

When checking instruments before use, please check their functionality. Visible defects, cracks, bent parts and / or too hard action indicate that the instrument needs repair and must not be used any longer.

Instrument Care

1. Cleaning

Initial Decontamination

Immediately after use disassemble the instrumentation. Open all joints. Place the components in a disinfectant solution for decontamination (cf. Section 2 "Disinfection").

Cleaning

Carefully rinse all instrument parts with lukewarm water. Use a mild detergent for persistent soilings. Soft brushes and the cleaning gun may be used for cleaning the instrument inside.

Rinsing

After cleaning rinse with deionized water (Aqua destillat).

Drying

Let all parts drain. Remove remaining water with a soft cloth and sponges.

Ultrasonic Cleaner

Immerse hand instruments in an ultrasonic cleaner for 5 min at a frequency of 40 kHz or higher. Never use an ultrasonic cleaner for telescopes and other endoscopic instruments !

2. Disinfection

Disinfection Bath

Disassemble the instrumentation. Open all stopcocks. Place the instrumentation on the sieve tray of the disinfection container. Lower the sieve tray into the container which is filled with a disinfectant solution.

Instrument Grasping Forceps

To manipulate the instrument components in the disinfectant solution use the grasping forceps for instruments which feature rubber pads on the jaws. Other implements may damage the instruments.

Disinfectant Solution

Cleaning and disinfectant solutions may damage instruments and their accessories considerably. Therefore use only those solutions that have been approved by their manufacturers for use with instruments.

Material Tolerance

The instruments have been tested regarding their tolerance of aqueous solutions of 70 % (v/v) ethanol (wiping) or aqueous solutions of 1-2 % (w/v) glutaraldehyde (immersion). However, this recommendation concerns only the tolerance of the material against the disinfectant and should not be regarded as a statement about the germicidal effectiveness. For details about the efficacy of a disinfectant please refer to the manufacturer.

Concentration and Immersion Time

For recommendations about the disinfectant's concentration and time of immersion refer to the instructions of the manufacturer. Do not exceed the recommended values so as to avoid damaging the instruments !

Rinsing

After immersion in disinfectant solution carefully rinse all components under sterile conditions using sterilized deionized (distilled) water so as to remove all toxic remains of the disinfectant.

Drying

Dry the instruments with sterile cloths and sponges. Wrap the instruments in sterile cloths. Store the instruments sterile in closed containers.

CAUTION! READ SPECIFIC INSTRUMENT INSTRUCTIONS BEFORE EVERY STERILIZING !

Every Instrument may not be compatible with all procedures listed below. Severe damage can result.

3. Sterilization

Disassembly of the Instrumentation

For sterilization disassemble the instrument set. Open all stopcocks.

Sterilizing Foil

Before sterilization seal the instruments in sterilizing foil. Alternatively, a suitable sterilization container can be used (refer to the instruction manual of the sterilization container).

Steam Sterilization

The Company recommends autoclaving the instruments for 5 min at 134°C (273°F).

Autoclavable products are designed for steam sterilization according to AAMI SSSA, BS 3970 and DIN 58 946 Teil 2.

Never exceed a temperature of 138°C. Always refer to the instruction manual of the autoclave.

Cooling

After autoclaving let all components cool down to room temperature without additional cooling. Sudden changes in temperature may damage the instruments. Never rinse the instruments with cold water for cooling.

Gas Sterilization

The instrument set can be gas sterilized using ethylene oxide and formaldehyde. Both substances are toxic and represent a potential health hazard. Observe domestic health care regulations. Aerate the processed items to remove toxic residues.

Formaldehyde Gas Sterilization

Process the items for 12h in an atmosphere of 14 % formaldehyde, relative humidity 90 %.

Ethylenoxide Gas Sterilization

Processing for max. 105 min. in an atmosphere of 12 % ethylenoxide, max. relative humidity 55 %, pressure max. 0,11 Mpa (1,1kg/cm²), temperature 55°C (130°F). Desorption time (outgassing) 7 days at room temperature or 12h in an aerator at 50-57°C (122-135°F).

Nobody will be dispensed from his own responsibility for his own action if following these instructions. Everybody in so far acts at his own risk. Every liability by the author of this document or all those who have contributed to this document is excluded.