

## **RETRACTORS**

hand-held dental retractors  
gingival cord packers  
cotton roll holders

### ***INSTRUCTION FOR USE***

The devices are for multiple use.

#### **Target groups**

No limitations for target treatment group – retractors can be used for all groups of patients without restrictions.

#### **Precautions**

- 1) Prior to use the device make sure of its integrity and absence of rust on it.
- 2) The devices are supplied in non-sterile state and are to be sterilized as follows:
  - submerge device in cleaning agent solution with neutral pH for 20 min;
  - rinse the device thoroughly with purified water for 3-5 min;
  - perform standard moist heat / steam sterilization procedure following the sterilizer instructions.
- 3) Consider for gag reflex upon usage of the device.

#### Upon sterilizing:

- 1) do not use cleaning agents with high percentage of chlorine and cleaners containing oxalic acid;
- 2) do not keep instruments in liquid medium for more than 3 hours.

### ***STERILIZATION***

The devices are supplied in non-sterile state and require sterilization to be carried out before the first use of the device and after each use of the devices.

#### **Presterilizing clearing**

In order to remove any inorganic and organic contaminants (including protein, fat, mechanical and others), including drug residues from medical device and to decrease in general microbial contamination to facilitate subsequent sterilization presterilizing clearing is carried out.

The devices can be cleaned in two ways:

- a) mechanical cleaning;
- b) ultrasonic cleaning.

#### **A. Mechanical cleaning**

- 1) Soak devices with full immersion in the cleaning agent with filling the cavities and channels with cleaning agent right after the use;
  - 2) Wash devices in the same cleaning agent in which it was soaked using a brush;
  - 3) Rinse with running water (channels - using a syringe or electric suction);
  - 4) Rinse with distilled water (channels - using a syringe or electric suction);
- It is up to end user to ensure that cleaning agent is suitable for medical devices mechanical cleaning and use it in accordance with its instruction on use.

#### **B. Ultrasonic cleaning**

- 1) Fill the ultrasonic bath container with the devices (collapsible products were placed in disassembled form; products with locks - open), then the cleaning agent was added to at least 1/3 and not more than 2/3 of the volume of the container of the ultrasonic bath;
- 2) Process in an ultrasonic bath with the temperature of the cleaning agent at least 18°C;
- 3) Rinse with running water (channels - using a syringe or electric suction);
- 4) Rinse with distilled water (channels - using a syringe or electric suction);

It is up to end user to ensure that cleaning agent is suitable for use in ultrasonic baths and use it in accordance with its instruction on use.

**Sterilization process:**

**Procedure:**

- 1) Disinfect your hands;
- 2) Put on disposable gloves;
- 3) Put the cleaned the devices in the autoclave bag;
- 4) Carry out the sterilization in accordance with the instruction of the autoclave manufacturer at 134°C for 5 minutes.

**Warning:**

- 1) Do not use detergents or disinfectants containing strong alkalines (pH>9), strong acids (pH<4), phenols or iodophors, hydrogen peroxide, interhalogenic agents, halogenic hydrocarbons, strong oxidizing agents, organic solvents, aldehydes.
- 2) Dry the devices thoroughly before sterilization.
- 3) Follow instructions of autoclave (sterilizer) manufacturer.
- 4) To avoid corrosion of the metal due to electrolysis, do not place devices in autoclave together with products made of aluminum, brass and copper.
- 5) Do not use / sterilize the devices in case of presence of traces of rust on the surface or traces of surface damage.

**Storage:** Sterilized devices can be stored:

- 1) In the UV-chamber – please refer for the instruction of the UV-chamber for the detailed storage conditions.
- 2) In the autoclave bags - please refer for the instruction of the autoclave bags for the detailed storage conditions. Products sterilized in autoclave bags should be stored in closed cabinets in clean, dry rooms, preferably at a temperature of 15-30°C and a relative humidity of 33-50%, avoiding exposure to direct sunlight. Unauthorized access to these rooms should be excluded.

*Operating instructions*

**HAND HEL DENTAL RETRACTORS**

**Preparation and sterilization:**

1. Open the packaging.
2. Make sure that there are no:
  - signs of violation of the integrity of the device(including cracks and chips)
  - traces of rust or dirt on the surface.
3. Carry out disinfection, pre-sterilization cleaning and sterilization according to current instruction for use
4. Use only after sterilization.

**Operating procedure:**

**Retractors №1.011, №1.012**

1. Take the retractor by the slightly curved edge.
2. Place the curved edge of the retractor behind the cheek and push it back to provide access to the working area.
3. Carry out the necessary manipulations.
4. Remove the retractor from the oral cavity.

### **Retractor №1.013**

1. Orient the retractor axis parallel to the patient's nose line.
2. Compress the retractor in a direction perpendicular to its axis.
3. Insert the cylindrical grooves behind the cheeks, while moving the lips apart.
4. Slowly reduce the gripping force of the retractor, allowing the grooves to extend the cheeks and expand the area of the parted lips, allowing access to the working field.
5. Carry out the necessary manipulations.
6. Remove the retractor from the oral cavity.

### **Retractors № 1.117, №1.119**

1. Select the area of the dental arch that you want to isolate.
2. If necessary, close the excretory duct of the parotid salivary gland with a gauze swab.
3. Holding the retractor by the grip handle, place it on the selected area so that the teeth and gingival margin are between the lingual and buccal protective walls.
4. If necessary, install hygroscopic rollers between the protective walls of the device and the teeth.
5. Carry out the necessary manipulations.
6. Remove the retractor from the oral cavity.

### **Retractors №1.017, №1.019**

1. Align the retractor with the holding handle.
2. Select the area of the dental arch that you want to isolate.
3. If necessary, close the excretory duct of the parotid salivary gland with a gauze swab.
4. Holding the retractor by the grip handle, place it on the selected area so that the teeth and gingival margin are between the lingual and buccal protective walls.
5. If necessary, install hygroscopic rollers between the protective walls of the device and the teeth.
6. Carry out the necessary manipulations.
7. Remove the retractor from the oral cavity.

### **Warning:**

Do not use the retractor in case of:

- the presence of traces of rust,
- identifying signs of cracking of the retractor.

When installing the retractor:

- avoid sharp compression of the retractor.

The criterion for the unsuitability of retractors for use is the violation of its integrity. For retractors №1.117 and №1.119, an additional criterion is the weakening of the thread in the handle and the impossibility of reliable fixation of the working part.

### **GINGIVAL CORD PACKERS №1.016S, №1.016R**

#### **Preparation and sterilization:**

1. Open the packaging.
2. Make sure that there are no:
  - signs of violation of the integrity of the device (including cracks and chips)
  - traces of rust or dirt on the surface.
3. Carry out disinfection, pre-sterilization cleaning and sterilization according to current instruction for use
4. Use only after sterilization.

**Operating procedure:**

1. Select the size of the cord packer according to the size of the tooth.
2. Moisten the floss with a solution such as 25% buffered aluminum chloride solution.
3. Cover the prepared tooth with the floss.
4. Select the appropriate side of the cord packer for the tooth position.
5. Using the cord packer, gently insert the floss between the tooth and the gum from the mesial surface.
6. Using the cord packer, continue to lay the floss from the distal and lingual sides.
7. Remove the cord packer from the oral cavity.

**Warning:**

Do not use the cord packer in case of:

- presence of traces of rust,
- identifying signs of cracking of the cord packer

When installing the retractor:

- avoid sharp compression of the cord packer.

**COTTON ROLL HOLDERS № 1.010****Preparation and sterilization:**

1. Open the packaging.
2. Make sure that there are no:
  - signs of violation of the integrity of the device (including cracks and chips, rupture of arcs in any of the places)
  - traces of rust or dirt on the surface.
3. Carry out disinfection, pre-sterilization cleaning and sterilization according to current instruction for use
4. Use only after sterilization.

**Operating procedure:**

1. Outside the mouth, place two hygroscopic rollers in the cylindrical grooves of the cotton roll holder. The diameter of the rollers is from 8 to 12 mm.
2. Spread the grooves to the sides and place the cotton roll holder in the mouth, orienting the rollers on both sides of the dentition in the area of the transition fold. The bridge connecting the cylindrical grooves should be oriented towards the inside of the oral cavity.
3. Carry out the necessary dental procedures, controlling the degree of filling the rollers with saliva. If the rollers become saturated with saliva, remove the cotton roll holder from the oral cavity and replace the rollers.

The criterion for the unsuitability for use of cotton roll holder is the violation of its integrity.