

## Processing of viscose sponges

These instructions apply to all sponge products (sponge pockets, pre-cut sponges, Vaco sponges) sold by Zimmer MedizinSysteme GmbH.

<b>Material</b>	The sponges are made of viscose.
<b>Material durability</b>	The sponges are resistant to alcohol and temperatures up to 134°C. Acids and bases damage the material.
<b>Criticality</b>	When used as intended, the sponges are considered as “uncritical” in relation to hygiene due to the use on non-injured and healthy skin (see RKI guideline for example).



- When handling chemicals (e.g. cleaning agents or disinfectants) as well as to protect from infections, suitable personal protective equipment (e.g. goggles, protective gloves) should be worn. Observe the information for use from the respective manufacturer.
- The sponges are brittle when dry. If they are mechanically stressed in this condition (folded or squeezed), they break.

## Cleaning and disinfection

### Manual method (thermal disinfection)

<b>Pretreatment</b>	It is recommended to rinse the sponges under running lukewarm water directly after use in order to remove heavy soiling and prevent it from becoming dried on.
<b>Materials needed</b>	<ul style="list-style-type: none"><li>▪ Open container made of metal or plastic</li><li>▪ Sink</li><li>▪ Tap water</li><li>▪ Metal pan</li><li>▪ Cooking facilities</li><li>▪ Absorbent cloth</li></ul>
<b>Cleaning</b>	<ol style="list-style-type: none"><li>1. Place the sponges in a container in a sufficient amount of lukewarm water (40°C) and wait until they are fully saturated.</li><li>2. Squeeze the sponges gently until all visible soiling is detached.</li><li>3. Rinse the sponges under running water.</li><li>4. Squeeze the sponges until no more water drips out. Avoid applying too much mechanical stress to the sponges.</li></ol>
<b>Disinfection, thermal method</b>	<ol style="list-style-type: none"><li>1. Place the sponges in a pan filled with tap water.</li><li>2. Heat the water to the boiling point and maintain this temperature for at least 15 minutes. Ensure that all sponges are fully immersed in the water.</li><li>3. Pour out the water with the sponges and cool them by pouring plenty of cold water over them.</li><li>4. Squeeze the sponges until no more water drips out. Avoid applying too much mechanical stress to the sponges. <b>Caution:</b> Inadequate cooling leads to a risk of burns!</li></ol>
<b>Drying</b>	To dry the sponges, lay them on a clean, absorbent cloth and cover them with a cloth to protect them from contamination. <b>Note:</b> When completely dry, the sponges become brittle and should not be subject to

mechanical stress.

- Inspection** 1. Check whether the sponges are free of holes and other damaged areas which could lead to direct contact between the electrode and the patient.  
2. Check whether the sponges have an even thickness over the entire surface.
- Packaging** Pack the sponges in fabric or plastic bags or other suitable dustproof packaging to protect them from dust and soiling.
- Storage** Store the packed sponges in a cool and dry place and protect them from direct sunlight.

## Automatic method (thermochemical disinfection washing method)

- Pretreatment** It is recommended to rinse the sponges under running lukewarm water directly after use in order to remove heavy soiling and prevent it from becoming dried on.
- Materials needed**
- Washing machine for chemical disinfection
  - Mesh bag
  - Dryer
  - Disinfectant detergent (e.g. Desosan)
- Cleaning/Disinfection** **Note:** The cleaning and disinfection procedure was validated using the disinfectant detergent Desosan. It can be assumed that other RKI-listed methods yield comparable results. Where necessary, the method should be validated.
1. Place the sponges in a suitable mesh bag. The sponges should not be packed too tightly to avoid affecting the efficacy of the washing procedure.
  2. Wash the sponges with a suitable combination of temperature and duration (60°C for 15 minutes, liquor level 1:5, 6 g/l Desosan).
  3. Rinse the sponges in the machine (three 3-minute rinse cycles, liquor level 1:5). Spin the sponges to pre-dry them (e.g. 3 minutes at 930 min<sup>-1</sup>).
- Caution:** If the rinse time is shorter, disinfectant detergent residue can remain in the sponge; this can cause skin irritation in the patient!
- Drying** 1. Place the sponges in the mesh bag in the dryer. Select a program which will not fully dry the sponges.  
**Note:** When fully dried, the material becomes brittle and the sponges could become damaged.
- Inspection** 1. Check whether the sponges are free of holes and other damaged areas which could lead to direct contact between the electrode and the patient.  
2. Check whether the sponges have an even thickness over the entire surface.
- Packaging** Pack the sponges in fabric or plastic bags or other suitable dustproof packaging to protect them from dust and soiling.
- Storage** Store the packed sponges in a cool and dry place and protect them from direct sunlight.

## Other information

- Shelf life** The sponges from Zimmer MedizinSysteme GmbH are made of viscose, a chemically modified natural substance obtained from wood. Thus they unfortunately do not have an unlimited shelf life. Therefore, over the course of time – depending on use and handling – there may be destruction of the material.

The use of fully synthetic materials is not possible because of the limited water absorption and the poor conductivity for electrical current due to the closed pores.

**Brittleness**

The sponges are brittle when dry. If they are mechanically stressed in this condition (folded or squeezed), they break.

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