Instructions for Use: Tube Brushes

<table>
<thead>
<tr>
<th>Brand Name of Product</th>
<th>Tube Brushes, Reamer Brushes, Trumpet Valve Brush</th>
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</thead>
<tbody>
<tr>
<td>Generic Name of Product</td>
<td>Tube Brushes, Reamer Brushes, Trumpet Valve Brush</td>
</tr>
<tr>
<td>Purpose of Product</td>
<td>To assist in cleaning channels and lumens of cannulated items in conjunction with a suitable cleaning solution, according to the manufacturer's (Mfr.'s) IFU.</td>
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<tr>
<td>Range of Applications for Product</td>
<td>Any cannulated item for which brushing of internal channels is a recommended step in the cleaning process per the Mfr.'s IFU.</td>
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</tbody>
</table>
| Key Specifications of Product | ● Reusable  
● Nylon bristles  
● Stainless-steel twisted wire  
● Variety of lengths and diameters |

**Shipping & Storage**

| Shipping Conditions & Requirements | N/A |
| Storage Conditions | N/A |
| Packaging Contents | N/A |
| Shelf Life | N/A |

**Instructions for Using Product**

| Description of Use(s) | N/A |
| Preparation for Use | ● Cleaning any cannulated item requires the use of the proper size cleaning brush in accordance with Mfr.'s IFUs.  
(Important) Match the diameter size of the brush with the channel being cleaned.  
Use the Healthmark Brush Sizing Chart or similar type of tool to select the proper diameter brush.  
(Critical) Select a brush longer than the channel to ensure the entire channel receives cleaning action.  
Ensure the material composition of the brush bristles is suitable for the item to be cleaned. (NOTE: This should be in compliance with the item’s Mfr.’s IFU.  
 o Inspect brushes prior to each use to ensure they are not worn, frayed, or damaged. Discard/do not use the brush if discrepancies are noted.  
 o Check in-between brush uses for any residual organic soil that may cross-contaminate the next device cleaned.  
 o If there is visual soil, the brush should be cleaned in accordance with the method(s) described below. |
| Diagrams (drawings, pictures) | N/A |
| Steps for Use of Product | Consult the Mfr.’s IFU for the item you are cleaning and follow the instructions closely.  
● Insert the cleaning brush into lumen using short strokes and a twisting motion (helical spinning of the brush) to help remove debris from the lumen. Feed the brush through the lumen until it emerges from the distal end. |
• (Important) Ensure the brush is long enough to exit the lumen/channel completely. When brushing, examine the bristles and clean them before using again.
  • Brushing should pass the brush freely through the lumen.
    o Stop advancing the brush if significant resistance is encountered and pull back.
    o Brushing through resistance might cause damage to the lumen.

See Brush Support White Paper [click here].

<table>
<thead>
<tr>
<th>Interpretation of Results</th>
<th>N/A</th>
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</thead>
<tbody>
<tr>
<td>Contraindications of Test Results</td>
<td>N/A</td>
</tr>
<tr>
<td>Documentation</td>
<td>N/A</td>
</tr>
</tbody>
</table>
| Special Warnings and Cautions | ● Tube style brushes are intended for use as cleaning tools only (NOT for use in patient care or aseptic techniques).
  ● Healthmark recommends that brushes are thoroughly cleaned during and between uses and disinfected at least daily. Preferably between each use. See “Reprocessing Instructions” below. |
| Disposal | It is recommended to dispose tube brushes in biohazard containers since tube brushes are used to clean patient-used items. |

### Reprocessing Instructions

<table>
<thead>
<tr>
<th>Point of Use</th>
<th>N/A</th>
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</table>
| Preparation for Decontamination | Rinse gross contaminants from the brush in a deep sink using the facility’s:
  ● Spray apparatus.
  ● Cold-water supply. |
| Disassembly Instructions | N/A |
| Cleaning – Manual | ● Clean brushes manually using a high-alkaline instrument detergent or an enzymatic detergent with suitable enzymes for cleaning the soil types the brush may come in contact with during use (i.e., protease, lipase, etc.).
  ● Follow the cleaning agent’s IFU to ensure sufficient exposure time is allowed for the cleaning solution to work.
  ● Agitating the brush during the cleaning process, to improve results, is recommendable. Accomplish this by swishing the brush and physically rubbing the bristles in the cleaning solution between gloved fingers. |
| Cleaning – Automated | ● Cleaning via machine is recommended in a washer disinfector cleared by the FDA.
  ● Position products in the washer to allow maximum water penetration and drainage.
  ● *No overlapping*: partially covered items will not be washed properly
  ● Secure brushes in some way (i.e., a wire or perforated tray that has a wire or perforated lid and bottom) to prevent brushes from blowing around in the wash chamber during cleaning. A container, such as the brush cleaning tube from Healthmark, is a suitable solution.
  ● Clean brushes with the facility’s approved cleaning solution used in the department’s ultrasonic washer.
  ● Rinsing with critical water for the final rinse is recommended.
  ● Use the “instrument” cycle on the automated washer. |
| Disinfection | ● The thermal disinfection stage of an automated washer is sufficient for disinfection of the cleaning brushes.
  ● Brushes may be disinfected with liquid chemical disinfectants in accordance with the disinfection Mfr.’s IFUs.
    o Check the material compatibility information from the disinfectant Mfr.
    o Disinfectant(s) should be compatible with nylon and stainless steel. |
| Drying | N/A |
| Maintenance, Inspection and Testing | ● Inspect for wear, fraying, damaged bristles, and the twisted wire shaft. If observed, discard the brush in compliance with the disposal instructions above.
  ● Examine brushes between devices for any residual organic soil that might contaminate the next device cleaned. If there is visual soil, the brush should be cleaned in accordance with the method(s) described above.
  ● Absent bristles from their original positions means do not use.
  ● Compare the used brush to a non-used (new brush). If they are different (e.g., bent shaft, missing bristles, etc.), do not use the brush and get a new brush to continue the cleaning process. |
Examples of normal brush and brush damage:

<table>
<thead>
<tr>
<th>Normal Brush</th>
<th>Damage to the shaft</th>
<th>Fallen bristles</th>
<th>Loose or missing bristles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damaged brushes should not be used if your brush looks like the examples below compared to a new brush.</td>
<td>If the shaft is bent in any way from the original position, do not use it.</td>
<td>If bristles are fallen and not upright compared to original position, do not use.</td>
<td>If bristles are missing in spots/location(s) from the original position, do not use.</td>
</tr>
</tbody>
</table>

### Reassembly Instructions
N/A

### Packaging
N/A

### Sterilization
- Recommended U.S. cycles for steam sterilization:
  - 132 °C (270 °F) for 4 minutes
  - 135 °C (275 °F) for 3 minutes.
- Maximum temperature and time: 135 °C (275 °F) for 30 minutes.

### Storage
N/A

### Additional Information
Follow all Mfr.'s directions for proper usage and disposal of all cleaning agents and chemical disinfectant agents.

### Related Healthmark Products
Brush Cleaning Tools

### Other Product Support Documents
ProSys™ Brochure, ProSys™ Price List

### Reference Documents
N/A

### Customer Service Contact
Healthmark Industries Company, Inc.
18600 Malyn Blvd.
Fraser, MI 48026