Ultrasound System

Cleaning, Disinfection & Sterilization Guide

[Advanced]

mindray

Ultrasound system

Cleaning, Disinfection & Sterilization Guide

[Advanced]

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- The product is used in accordance with the instructions for use.

Table of Contents

Intellectual Property Statement ..... **II**
Statement ..... **II**
Customer Service Department **1**
Important Information **1**
About this Guide **2**
Meaning of Signal Words **2**
1 General Information About Cleaning, Disinfection and Sterilization **3**
1.1 Safety Precautions 3
1.2 Brief Introduction to Materials 4
1.2.1 Plastics 4
1.2.2 Stainless Steel 5
1.2.3 Silica Gel 5
1.2.4 Epoxy Glue 5
1.2.5 Glass 5
2 Inspection Before and After Use **7**
2.1 Appearance Inspection 7
2.2 Use of Probe Sheath 7
2.3 Wearing the Probe Sheath 8
3 Cleaning, Disinfecting/Sterilizing Probes **9**
3.1 Cleaning, Disinfection, and Sterilization Overview 10
3.2 Selecting a Cleaning, Disinfection/Sterilization Method 10
3.3 Processing Non-Critical Probes 11
3.4 Processing Semi-Critical Probes 12
3.4.1 Before Processing 12
3.4.2 Cleaning 12
3.4.3 High-Level Disinfection 13
3.5 Processing Critical Probes 14
3.5.1 Before Processing 14
3.5.2 Cleaning 15
3.5.3 Sterilization 16

4 Cleaning and Disinfecting the TEE Probe 19
4.1 Before Processing 20
4.2 Cleaning 20
4.2.1 Compatible Detergents 20
4.2.2 Cleaning Procedure 21
4.3 Disinfection 21
4.3.1 Compatible Disinfectants 21
4.3.2 Disinfection Procedure 22
4.4 Recommended Automated Reprocessor (AR) 23
5 Cleaning and Sterilizing the Laparoscopic Probe 25
5.1 Before Processing 25
5.2 Cleaning 26
5.3 Sterilization 27
5.3.1 Sterilization using Sterilization System 27
5.3.2 Sterilization using Solution 28
5.4 List of Cleaner, Disinfectant and Sterilant/Sterilization System 29
5.4.1 Validated Cleaner and Sterilant/Sterilization System 29
5.4.2 Material Compatible Disinfectant 30
6 Cleaning and Sterilizing the Needle-guided Bracket 33
6.1 Cleaning 33
6.2 Sterilization 34
6.2.1 Sterilization with a Sterilant 34
6.2.2 High-Pressure Steam Sterilization 34
7 Cleaning and Disinfecting the Main Unit 37
7.1 Cleaning 37
7.1.1 Cleaning the Display 37
7.1.2 Cleaning the Control Panel 38
7.1.3 Cleaning the Cover 38
7.1.4 Cleaning Other Parts 38
7.2 Disinfection 39
7.2.1 Identifying the Areas That can be Disinfected 40
7.2.2 Disinfection Procedure 64
8 Cleaning Other Accessories 67
8.1 Cleaning the Holders 67
8.2 Cleaning the ECG Cables 67
8.3 Cleaning the Peripherals 67
Appendix A Compatible Probe Cleaners and Disinfectants 69

A.1 Cleaners....69
A.2 Disinfectants....72
A.2.1 Wipes....72
A.2.2 Sprays....77
A.2.3 Solutions....80
A.2.4 Devices....84
A.2.5 Powders....85
Appendix B Composition....87
B.1 Active Ingredients of the Cleaner....87
B.2 Active Ingredients of the Disinfectant....87
Appendix C Registered Disinfectants in Canada....91
Appendix D Registered Disinfectants in FDA Region....93

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Address:	Eiffestraβe 80, Hamburg 20537, Germany
Tel:	0049-40-2513175
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Manufacturer:	Mindray DS USA, Inc.
Address:	800 MacArthur Blvd. Mahwah, NJ 07430-0619 USA
Tel:	+1 (201) 995-8000
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Important Information

Thank you for your expression of confidence in the Mindray brand name. Mindray is constantly working on the further development of all products. Please appreciate that changes to the scope of supply in form, equipment and technology are possible for this reason. Therefore, no claims may be deduced from the information, figures and descriptions in this guide.

This guide contains warnings regarding foreseeable potential dangers, but you shall always be alert to dangers other than those indicated as well. Mindray shall not be liable for damage or loss that results from negligence or from ignoring the precautions and operating instructions described in this guide.

If the administrator for this system is changed, be sure to hand over this guide to the new manager.

⚠ WARNING

The probe and accessories supplied with it are not delivered disinfected or sterilized. Cleaning and disinfection (or sterilization) in accordance with this guide before use are required. After disinfection or sterilization, residual chemicals must be completely removed. Otherwise, personal injury or damage to the probes or accessories may occur.

About this Guide

Please follow the descriptions in the guide to clean and disinfect (or sterilize) the probes, needle-guided brackets, entire machine and accessories manufactured by Mindray. The guide is intended to provide information about cleaning and disinfecting (or sterilizing) the ultrasound system effectively, and also about protecting the ultrasound system from damages caused by incorrect cleaning, disinfection or sterilization procedures.

Mindray has verified that the disinfectants and disinfection equipment descried in this guide are compatible with the ultrasound system. All the verified disinfectants are listed in disinfectant list of this guide.

The disinfectants and sterilants described in the guide are recommended by Mindray. For details on effectiveness and clinical application of these disinfectants and sterilants, refer to the instructions of disinfectant and sterilant manufacturers.

The functions and accessories described in the guide may vary with the specific system you purchased.

Meaning of Signal Words

In this guide, the signal words ⚠ **DANGER**, ⚠ **WARNING**, ⚠ **CAUTION**, **NOTE** and Tip are used regarding safety and other important instructions. The signal words and their meanings are defined as follows. Please understand their meanings clearly before reading this guide.

Signal word	Meaning
⚠ **WARNING**	Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury.
⚠ **CAUTION**	Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury.
NOTE	Indicates a potentially hazardous situation that, if not avoided, may result in property damage.

1 General Information About Cleaning, Disinfection and Sterilization

1.1 Safety Precautions

Follow the following precautions strictly to ensure the safety of the patient and the operator.

⚠ WARNING

- **Do not subject the probe to shock. A defective probe may cause electric shock to the patient.**
- **Do not disassemble the probe to avoid the possibility of electric shock.**
- **Never immerse the probe connector into liquids such as water or disinfectant, for the connector is not waterproof. Immersion may cause electric shock or malfunction.**
- **In normal diagnostic ultrasound mode, there is no danger of a normal-temperature burn; however, keeping the probe on the same region of the patient for a long time may cause such a burn.**

⚠ CAUTION

- **The probe is only for use with the specified ultrasonic diagnostic system. Please refer to the ultrasonic diagnostic system operation manual to select the proper probe.**
- **For clinical applications of a semi-critical or critical nature (e.g., intraoperative, transrectal, transvaginal, transesophageal, or biopsy procedures), it is recommended, when appropriate, to use sterile, legally marketed probe sheaths.**
- **Damage to the probe may occur due to its contact with improper detergents or coupling gel. DO NOT dip the probe in the strong polar solution of ethanol, chloride of lime, ammonium chloride, acetone and formaldehyde. The probe should not make contact with solution or ultrasound gel containing oily medium such as mineral oil or lanoline.**
- **Coupling gel must be used during ultrasonic examination. Please use the ultrasound gel compliant with the relevant local regulations. And manage the ultrasound gel properly to ensure that it does not become a source of infection.**
- **Do not use the carrying case for storing the probe. If the carrying case is used for storage, it may become a source of infection.**

- **The probe and accessories supplied with it are not delivered disinfected or sterilized. Cleaning and disinfection (or sterilization) in accordance with this guide before use are required.**
- **Disposable components are packaged sterile and can be used once only. Do not use if integrity of packaging violated or if expiration date has passed. Please use the disposable components compliant with the relevant local regulations.**
- **Use the disinfection or sterilization solution recommended in this guide only. Otherwise, Mindray will not be liable for damage caused by other solutions. If you have any questions, please contact Mindray Customer Service Department.**

NOTE:

- Read the following precautions to prevent the probe from malfunction:
- Before connecting or disconnecting the probe, freeze the ultrasonic image or turn off the diagnostic ultrasound system.
- After completing each examination, clean, disinfect or sterilize the probes as required. If necessary, repeat the cleaning, disinfection (or sterilization) process before next use.
- To prevent the probe from being damaged, do not use it where it will be exposed to:
  - Locations exposed to direct sunlight
  - Locations subject to sudden changes in environmental temperature
  - Dust
  - Excessive vibration
  - Locations near heat generators
- Cleaning cannot be replaced by sterilization. Probes and needle-guided brackets must be cleaned before sterilization.
- Repeated disinfection will eventually damage the probe, please check the probe performance periodically.
- Repeated disinfection will degrade the performance and safety of the needle-guided brackets.

1.2 Brief Introduction to Materials

1.2.1 Plastics

Plastic is material consisting of any of a wide range of synthetic or semi-synthetic organic compounds that are malleable and so can be molded into solid objects. It is made up of additives including synthetic resin, filler, plasticizer, stabilizer and pigment.

The plastic housing molded by injection molding process is anti-stamping, heat-resistant and stable in dimensions. However, some general engineering plastics (especially ABS) contain unsaturated double bonds. During the storage or application of these plastics, due to external factors such as illumination and oxidization, unsaturated double bonds will result in yellowing, degraded mechanical performance or even cracking.

Plastics in reusable medical devices manufactured by Mindray can be cleaned and disinfected (or sterilized) by using the recommended methods. For all plastics cannot withstand repeated actions of alcohols, do not disinfect or sterilize the plastic material in a way that is not recommended.

Plastic is mainly used in probe housings.

1.2.2 Stainless Steel

Stainless steel is corrosion resistant due to a natural passive layer which forms in the air. If this passive layer is destroyed by certain substances (solid, liquid or gaseous), there is no longer any corrosion resistance. The stainless steels may also corrode, particularly if they are in contact with blood or tissue residues.

Therefore make certain, not only for hygienic reasons, that organic remnants have been completely removed.

Stainless steel is mainly used in needle-guided brackets.

1.2.3 Silica Gel

Silica gel is excellent in thermo oxidative stability, weather resistance, and resistance to oxygen, ozone and ultraviolet radiation, for the backbone of silica gel consists of Si-O-Si bonds. However, polysiloxane has a helical structure and therefore has a good gas and vapor permeability.

The long-time immersion disinfection or sterilization may result in the inflation of polysiloxane. And the solution may permeate silica gel to damage the parts protected by silica gel. Therefore, disinfection should be performed in accordance with the immersion time specified by the disinfectant manufacturer.

Nevertheless, silica gel attracts dirt. Thus, make sure that organic residues are removed completely after cleaning and disinfection (or sterilization).

Silica gel is mainly used in sealant of acoustic lens and housing of probe.

1.2.4 Epoxy Glue

Epoxy glue, as one kind of thermosetting resins, has a good bonding effect on various interfaces, even in a high temperature of 110°C. It has resistance to ultraviolet radiation, erosion and weather.

The long-term immersion in peroxymonosulfuric acid, hydrogen peroxide, hypochlorite or glutaraldehyde may discolor epoxy glue slightly, but will not affect its performance.

Epoxy glue is mainly used in sealing of the probe housing.

1.2.5 Glass

Glass is mainly made up of various inorganic mineral substances, such as Zircon sand, borax and sodium carbonate. It also contains a little auxiliary materials. Its main ingredients are SiO_2 and other oxide. It has resistance to erosion.

Long-time immersion in disinfectant or sterilant solution will not affect its chemical properties.

Glass is mainly used in monitor and touch screen of the ultrasound system.

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2 Inspection Before and After Use

Brand new equipment should be unpacked and checked after delivery. If there is any transport damage, contact Mindray Customer Service Department immediately.

Every probe passes through an extensive cleaning and final check at the end of the manufacturing process. However, soiling is possible during transportation and storage. Therefore the probes must go through the complete cleaning and disinfection procedure before their first use.

Inspection before and after use must be performed as described below to ensure safe operation of the probe. If any abnormality is found, immediately stop using the probe and contact Mindray Customer Service Department or sales representative.

2.1 Appearance Inspection

Before and after each examination, confirm that there are no abnormalities of the probe surface or cable sheath, such as peeling, cracks, protruding parts, or looseness of the acoustic lens.

⚠ WARNING

Probe abnormalities may cause electric shock or injury to the patient. If any abnormality is found, immediately stop using the probe and contact Mindray Customer Service Department.

2.2 Use of Probe Sheath

Probe sheaths are available for use with all clinical situations where infection is a concern.

A sterile probe sheath is suggested to be used during intra-cavity examination or intra-operative examination.

Use a commercially available probe sheath.

To order probe sheath, contact:

CIVCO Medical Instruments Co.

102 First Street South, Kalona, IA 52247-9589 USA

Tel: 1-319-656-4447

E-mail: info@civco.com

http://www.civco.com

⚠ CAUTION

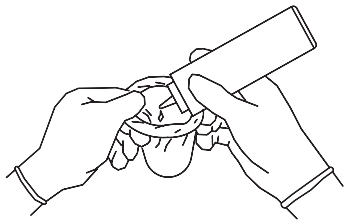
- **A probe sheath should be used once only to prevent infection.**

- **Use intact probe sheaths only.**
- **The probe sheath contains natural rubber latex and talc that can cause allergic reactions to some individuals.**
- **Use probe sheaths before the expiry date. Check if the probe sheath to be used is within the expiry period.**
- **Do not use pre-lubricated condoms as a sheath. Lubricant may not be compatible with the probe material and damage may result.**

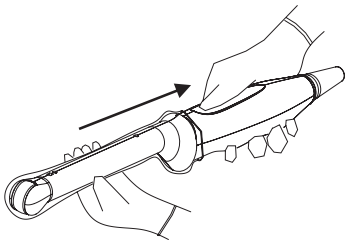
2.3 Wearing the Probe Sheath

The method of using a probe sheath is shown as follows (for reference only):

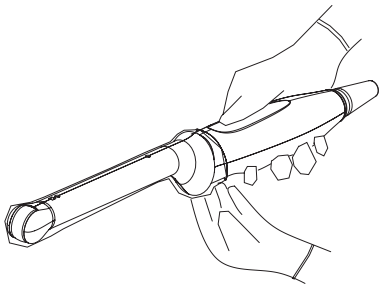
1. Apply an appropriate amount of coupling gel inside the sheath or on probe surface. Poor imaging may occur if no gel is applied.



2. Use proper sterile technique to insert the probe into a probe sheath. Pull probe sheath tightly over probe surface to remove wrinkles and air bubbles, and take care to avoid puncturing cover.



3. Secure the sheath with enclosed elastic bands.



4. Inspect the sheath to ensure there are no holes or tears.

3 Cleaning, Disinfecting/Sterilizing Probes

After completing each examination, clean, disinfect or sterilize the probes as required. If necessary, repeat the cleaning, disinfection (or sterilization) process before next use. When biopsy procedures have been performed, be sure to sterilize the needle-guided bracket. Fail to do so may result in the probe and the needle-guided bracket to becoming sources of infection. Please follow the instructions in the manual for cleaning.

⚠ WARNING

Never immerse the probe connector into liquids such as water or disinfectant, for the connector is not waterproof. Immersion may cause electric shock or malfunction.

⚠ CAUTION

- **No cleaning and disinfecting may result in the probe becoming a source of infection.**
- **Please follow the disinfectant manufacturer's manual for performing cleaning and disinfection, including preparing sterile water and cleaning and disinfection time.**

NOTE:

- After the examination, wipe off the ultrasound gel thoroughly. Otherwise, the ultrasound gel may solidify and degrade the image quality of the probe.
- The probe surface temperature should not exceed the probe storage and transportation temperature specified in the user manual during cleaning and disinfections. High temperature may cause the probe to become deformed or damaged.
- Observe the illustration graph carefully to immerse the probe. Only soak parts of the probe below the strain relief.
- Repeated disinfection or sterilization will eventually damage the probe, please check the probe performance periodically.
- Clean the probe thoroughly in accordance with the cleaning procedure before disinfection or sterilization.
- For details about probe types, refer to the operator's manuals of the ultrasound system.
- For details about recommended disinfectants for probes, see "Appendix A Compatible Probe Cleaners and Disinfectants".

3.1 Cleaning, Disinfection, and Sterilization Overview

Cleaning and disinfection refer to two distinct processes. According to the Centers for Disease Control and Prevention (CDC) “Guideline for Disinfection and Sterilization in Healthcare Facilities” (2008):

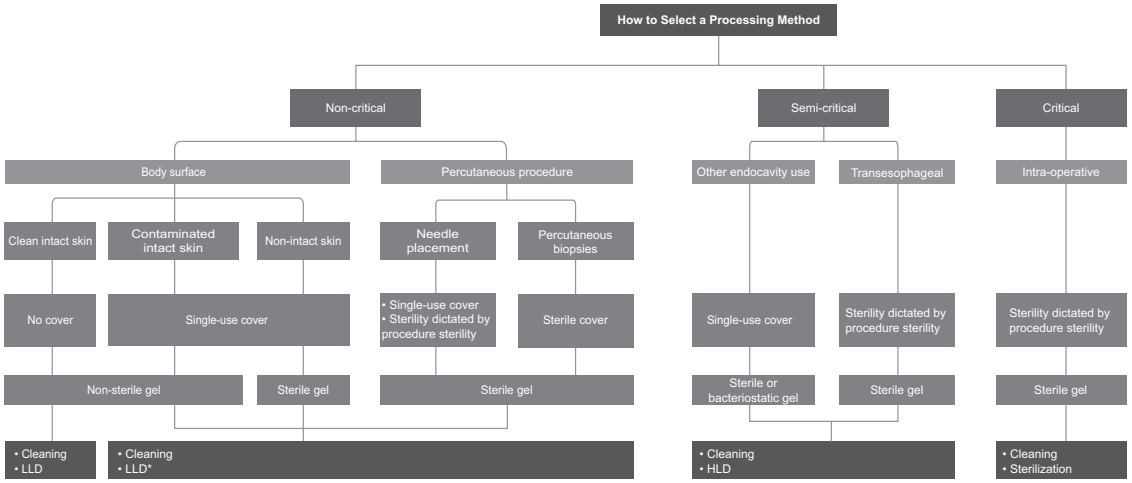
- Cleaning is the removal of visible soil (e.g. organic and inorganic material) from objects and surfaces and normally is accomplished manually or mechanically using water with detergents or enzymatic products. Thorough cleaning is essential before high-level disinfection and sterilization because inorganic and organic material that remains on the surfaces of instruments interfere with the effectiveness of these processes.
- Disinfection describes a process that eliminates many or all pathogenic microorganisms, except bacterial spores.
  - Low-Level Disinfection (LLD): Destruction of most bacteria, some viruses, and some fungi.
  - High-Level Disinfection (HLD): Destruction/removal of all microorganisms except bacterial spores.
- Sterilization describes a process that destroys or eliminates all forms of microbial life and is carried out in healthcare facilities by physical or chemical methods.

3.2 Selecting a Cleaning, Disinfection/Sterilization Method

Probes can be divided into three categories based on their intended use according to the standard ISO 17664-1:2021. Some probes may fall into more than one category (e.g. probes use for biopsy procedures). When selecting a disinfectant, determine the required level of disinfection based on intended use and possibility of cross-contamination.

- Non-critical items: come into contact with intact skin only or are devices not intended for direct patient contact. Probes that only come into contact with clean, intact skin are considered noncritical devices and require cleaning after every use. Cleaning may be followed by a low-level disinfectant spray or wipe. For details, see "3.3 Processing Non-Critical Probes".
- Semi-critical items: come into contact with mucous membranes. This category includes all endocavity probes - transvaginal, transrectal, and transesophageal (TEE). These semi-critical probes must be cleaned with an appropriate cleaner after use followed by high-level disinfection. For details, see "3.4 Processing Semi-Critical Probes".
- Critical items: enter normally sterile parts of the human body. These probes are considered critical and include all intraoperative probes. These probes must be cleaned with an appropriate cleaner after each use, followed by a sterilization process. For details, see "3.5 Processing Critical Probes".

Figure 3-1 Workflow of selecting a processing method



NOTE

LLD marked with * indicates that those categories must undergo low-level disinfectants that are effective against the mycobacteria and bloodborne pathogens. For details, consider referencing the position statement of the American Institute of Ultrasound in Medicine “Guidelines for Cleaning and Preparing External- and Internal-Use Ultrasound Transducers and Equipment Between Patients as well as Safe Handling and Use of Ultrasound Coupling Gel” at https://www.aium.org/resources/official-statements/view/guidelines-for-cleaning-and-preparing-external--and-internal-use-ultrasound-transducers-and-equipment-between-patients-as-well-as-safe-handling-and-use-of-ultrasound-coupling-gel.

3.3 Processing Non-Critical Probes

Processing of non-critical probes requires a two-step process: Cleaning of the probe followed by low-level disinfection.

⚠ WARNING

Use protective eyewear when disinfecting the probe using sprays.

Perform the following procedure:

1. Wear a pair of gloves to prevent infection through the whole processing.
2. Disconnect the probe from the system. If the sheath is used, take off the sheath and discard it.
3. Clean the probe.
   a. Select an appropriate low-level disinfectant wipe or a piece of disposable lint-free soft cloth soaked with a disinfectant spray. For details about recommended disinfectants for probes, see "Appendix A Compatible Probe Cleaners and Disinfectants".
   b. Thoroughly wipe all the surface starting from the probe head toward the probe cable. For details about the wiping time, refer to the wiping duration specified in the operator’s manual provided by the disinfectant manufacturer.

When necessary, clean and disinfect the seams or biopsy guide features by using disposable cotton swabs.

4. Disinfect the probe.

   Prepare a new low-level disinfectant wipe or a piece of disposable lint-free soft cloth soaked with a disinfectant spray. Thoroughly wipe all the surface starting from the probe head toward the probe cable again.

5. Inspect the probe. If visible dirt still exists, repeat the preceding steps to wipe the probe until it is all clean.

6. Allow the probe to air dry in a clean and well-ventilated place or dry the probe with a piece of disposable lint-free soft cloth or tissue.

   Do not dry the probe by heating.

7. Check whether the probe has defects such as peeling, rifts, bumps, cracks, or liquid spill. If such defects exist, the probe has reached the end of its service life. In this case, stop using it and contact the Mindray service department.

8. Store the probe in a cool, clean and dry environment.

3.4 Processing Semi-Critical Probes

Processing of semi-critical probes requires a two-step process: Cleaning of the probe followed by high-level disinfection.

For detailed information on the TEE cleaning and disinfection, see "4 Cleaning and Disinfecting the TEE Probe".

3.4.1 Before Processing

This step is to remove the ultrasound gel or other visible dirt.

1. Wear a pair of gloves to prevent infection through the whole processing.

2. Disconnect the probe from the system. If the sheath is used, take off the sheath and discard it. Wipe off the ultrasound gel or other visible dirt on the surface of the probe by using a damp piece of disposable lint-free soft cloth or tissue.

3.4.2 Cleaning

You can select wipes or detergent to clean the probe. For details about recommended cleaners or disinfectants for probes, see "Appendix A Compatible Probe Cleaners and Disinfectants".

Cleaning with Wipes

Perform the following procedure:

1. Use an approved cleaning or disinfectant wipe, cleaning sponge, or a disposable lint-free soft cloth soaked in approved cleaner or disinfectant. Thoroughly wipe all the surface starting from the probe head toward the probe cable.

   Some disinfectant wipes or sprays can be used for cleaning.

2. Dry the probe with a piece of disposable lint-free soft cloth or tissue.

   Do not dry the probe by heating.

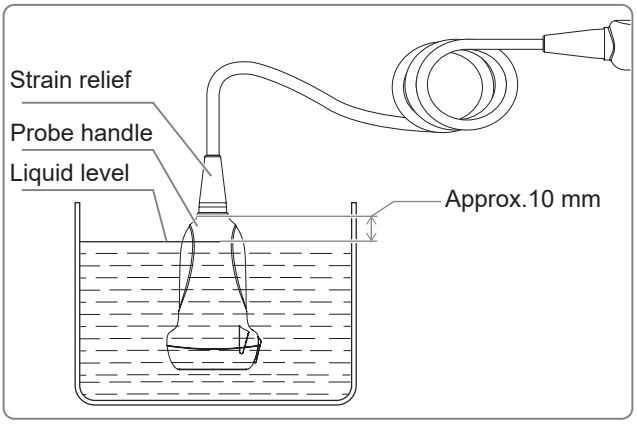
3. Inspect the probe. If visible dirt still exists, repeat the preceding steps to wash the probe until it is all clean.

Cleaning with Detergent

Perform the following procedure:

1. Choose an appropriate cleaning agent including mild detergents, and enzymatic.
2. Immerse the probe head fully in the cleaning fluid for at least 1 minute or according to cleaner manufacturer's instructions. Use a disposable lint-free soft cloth soaked in the approved cleaning fluid to thoroughly wipe the cable surface. Lightly clean the probe head with a piece of disposable lint-free soft cloth or soft sponge until no dirt is visible. When necessary, clean the seams or biopsy guide features by using disposable cotton swabs. Avoid using a brush to wash the lens because it may damage the probe.

   Observe the graph here carefully to immerse the probe. Only soak parts of the probe below the strain relief.



3. Rinse the probe thoroughly by using a large amount of clean water (about 7.5 L/2 gallons) at room temperature for about 1 minute to remove the residual dirt and cleaning solvent.
4. Dry the probe with a piece of disposable lint-free soft cloth or tissue.

   Do not dry the probe by heating.
5. Inspect the probe. If visible dirt still exists, repeat the preceding steps to wash the probe until it is all clean.

3.4.3 High-Level Disinfection

You can disinfect the probe by using an appropriate high-level disinfectant solution or device. For details about recommended disinfectants or devices for probes, see "Appendix A Compatible Probe Cleaners and Disinfectants".

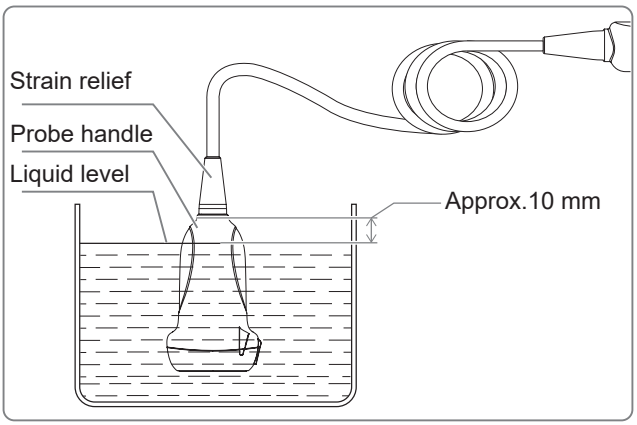
Some disinfectants in the form of wipe or spray can be used for high-level disinfection.

Disinfection with Reagent (Solution/Wipe/Spray)

Perform the following procedure:

1. Follow the operator's manual provided by the disinfectant manufacturer to disinfect the probe using a high-level disinfectant.
2. Prepare a disinfectant by using sterile distilled or softened water when necessary.
   - Soaking: Immerse the probe head in the disinfectant and shake the probe appropriately to remove any bubbles on the probe surface. For details about the probe immersion duration, see the operator's manual provided by the disinfectant manufacturer.

Observe the graph here carefully to immerse the probe. Only soak parts of the probe below the strain relief.



– Wiping: Use a market disinfection wipe product or disposable lint-free soft cloth wetted with disinfection spray. Thoroughly wipe all the surface starting from the probe head toward the probe cable for a duration according to the disinfectant manufacturer instructions.

3. Rinse the probe thoroughly by using a large amount of clean water (about 7.5 L/2 gallons) at room temperature for about 1 minute to remove the residual disinfectant. Or follow the disinfectant manufacturer's instructions regarding rinsing. Dry the probe with a piece of disposable lint-free soft cloth or tissue.

   Do not dry the probe by heating.

4. Check whether the probe has defects such as peeling, rifts, bumps, cracks, or liquid spill. If such defects exist, the probe has reached the end of its service life. In this case, stop using it and contact the Mindray service department.

5. Store the probe in a cool, clean and dry environment.

Disinfection with Device

Perform the following procedure:

1. Follow the operator's manual provided by the disinfection device manufacturer to disinfect the probe using a device.

2. After disinfection, check whether the probe has defects such as peeling, rifts, bumps, cracks, or liquid spill. If such defects exist, the probe has reached the end of its service life. In this case, stop using it and contact the Mindray service department.

3. Store the probe in a cool, clean and dry environment.

3.5 Processing Critical Probes

Processing of critical probes requires a two-step process: Cleaning of the probe followed by sterilization.

For detailed information on the laparoscopic cleaning and disinfection, see "5 Cleaning and Sterilizing the Laparoscopic Probe".

3.5.1 Before Processing

This step is to remove the ultrasound gel or other visible dirt.

1. Wear a pair of gloves to prevent infection through the whole processing.

2. Disconnect the probe from the system. If the sheath is used, take off the sheath and discard it. Wipe off the ultrasound gel or other visible dirt on the surface of the probe by using a damp piece of disposable lint-free soft cloth or tissue.

3.5.2 Cleaning

Select wipes or detergent to clean the probe. For details about recommended cleaners or disinfectants for probes, see "Appendix A Compatible Probe Cleaners and Disinfectants".

Cleaning with Wipes

Perform the following procedure:

1. Use an approved cleaning or disinfectant wipe, cleaning sponge, or a disposable lint-free soft cloth soaked in approved cleaner or disinfectant. Thoroughly wipe all the surface starting from the probe head toward the probe cable.

   Some disinfectant wipes or sprays can be used for cleaning.

2. Dry the probe with a piece of disposable lint-free soft cloth or tissue.

   Do not dry the probe by heating.

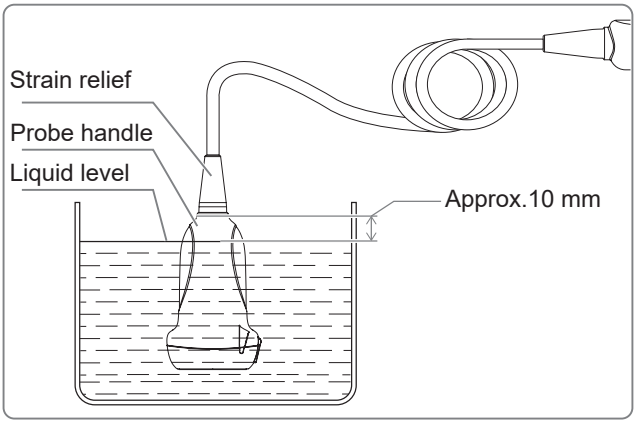
3. Inspect the probe. If visible dirt still exists, repeat the preceding steps to wash the probe until it is all clean.

Cleaning with Detergent

Perform the following procedure:

1. Choose an appropriate cleaning agent including mild detergents, and enzymatic.
2. Immerse the probe head fully in the cleaning fluid for at least 1 minute or according to cleaner manufacturer’s instructions. Use a disposable lint-free soft cloth soaked in the approved cleaning fluid to thoroughly wipe the cable surface. Lightly clean the probe head with a piece of disposable lint-free soft cloth or soft sponge until no dirt is visible. When necessary, clean the seams or biopsy guide features by using disposable cotton swabs. Avoid using a brush to wash the lens because it may damage the probe.

   Observe the graph here carefully to immerse the probe. Only soak parts of the probe below the strain relief.



3. Rinse the probe thoroughly by using a large amount of clean water (about 7.5 L/2 gallons) at room temperature for about 1 minute to remove the residual dirt and cleaning solvent.
4. Dry the probe with a piece of disposable lint-free soft cloth or tissue.

Do not dry the probe by heating.

5. Inspect the probe. If visible dirt still exists, repeat the preceding steps to wash the probe until it is all clean.

3.5.3 Sterilization

For intra-operative probes, they have to be thoroughly cleaned and sterilized after completing each examination.

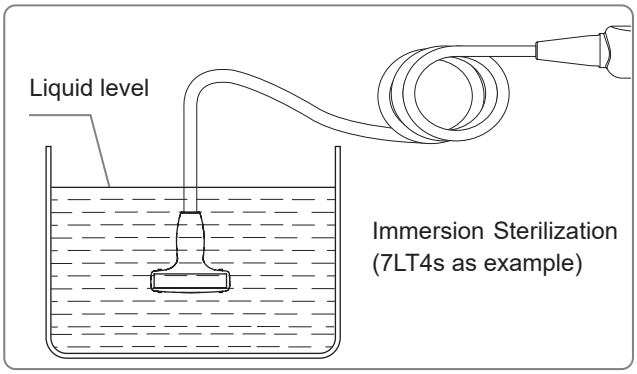
You can sterilize the probe by using an appropriate sterilant or device. For details about recommended sterilants or devices for probes, see "Appendix A Compatible Probe Cleaners and Disinfectants".

Sterilization with Sterilant

Perform the following procedure:

1. Follow the operator's manual provided by the sterilant manufacturer to sterilize the probe using a sterilant.
2. Prepare a sterilant by using sterile distilled or softened water when necessary.
3. Immerse the probe head in the sterilant and shake the probe appropriately to remove any bubbles on the probe surface.

   For details about the probe immersion duration, see the operator's manual provided by the sterilant manufacturer.



4. Rinse the probe thoroughly by using a large amount of sterile distilled or softened water (about 7.5 L/2 gallons) at room temperature for about 1 minute to remove the residual disinfectant. Or follow the sterilant manufacturer's instructions regarding rinsing. Dry the probe with a piece of sterile disposable lint-free soft cloth.

   Do not dry the probe by heating.

5. Check whether the probe has defects such as peeling, rifts, bumps, cracks, or liquid spill. If such defects exist, the probe has reached the end of its service life. In this case, stop using it and contact the Mindray service department.
6. Store the probe in a cool, clean and dry environment.

Sterilization with Device

Perform the following procedure:

1. Follow the operator's manual provided by the sterilization device manufacturer to sterilize the probe using a device.

2. After sterilization, check whether the probe has defects such as peeling, rifts, bumps, cracks, or liquid spill. If such defects exist, the probe has reached the end of its service life. In this case, stop using it and contact the Mindray service department.
3. Store the probe in a cool, clean and dry environment.

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4 Cleaning and Disinfecting the TEE Probe

This section describes the methods and precautions for cleaning and disinfection of TEE probes. After completing each examination, clean, disinfect the TEE probes as required. If necessary, repeat the cleaning, disinfection process before next use.

⚠ WARNING

- **Keep the control handle and system connector out of any cleaning or disinfection solutions. The control handle and cable may be cleaned with a damp cloth, but only the distal end of the transducer up to the 100 cm marker on the shaft (70 cm for P8-3Ts) may be placed into a disinfection solution.**
- **Do not use other disinfection methods like Iodine, Steam, Heat or Ethylene Oxide.**
- **To avoid injury to the patient, you must follow the manufacturer's recommendation for rinsing.**

⚠ CAUTION

- **To avoid damaging the transducer, the transducer should not be exposed to the disinfectant longer than specified to achieve the desired effect, but never longer than one hour.**
- **To avoid damaging the transducer, do not steam autoclave or subject the transducer to Ethylene Oxide (ETO).**
- **To avoid damaging the transducer, do not immerse the transducer in a solution containing ethanol.**
- **After disinfection, rinse the transducer thoroughly with clean water to remove all chemical residues. Chemical residues on the transducer may be harmful to the human body.**
- **The efficacy of disinfectants solutions is not guaranteed by MINDRAY. Contact the disinfectant manufacturers for information on the activity of the products.**

NOTE:

- After the examination, wipe off the ultrasound gel thoroughly, otherwise, the ultrasound gel may solidify and degrade the image quality of the transducer.
- Do not permit the transducer to become overheated (more than 55°C) during cleaning and disinfections. High temperature may cause the transducer to become deformed or damaged.
- Clean the probe thoroughly in accordance with the cleaning procedure before disinfection.

4.1 Before Processing

This step is to remove the ultrasound gel or other visible dirt.

1. Wear a pair of gloves to prevent infection through the whole cleaning, disinfection process.
2. Disconnect the probe from the system. If the sheath is used, take off the sheath and dispose it as directed by the hospital.
3. Wipe away the ultrasound gel or other visible dirt on the surface of the probe by using a damp piece of disposable lint-free soft cloth or tissue.

4.2 Cleaning

Only the following cleaners are recommended by Mindray to clean the TEE transducers. For the biological effectiveness and the correct use of the cleaners, see the information of the cleaner's manufacturer.

4.2.1 Compatible Detergents

Cleaner	Active ingredient	Concentration	Applicable for
Cidezyme/Enzol	Proteolytic enzymes	< 5%	P7-3T P7-3Ts P7-3TU P7-3TE P8-3Ts P8-2Ts P8-2TU XP8-2TU
Neodisher MediClean forte	Trisodium nitrilotriacetate	5-10%	
	2,2-Iminodiethanol diethanolamine	1-2%	
Prolystica 2x conc. Enzymatic Presoak & cleaner	Ethanolamine	1-5%	
	Protease	0.1-1%	
	Ethoxylated alcohol	1-5%	
	Polyalkylene glycol	1-5%	
	Glycerine	1-5%	
EMpower	Proteolytic enzymes	< 2%	P7-3T P7-3Ts P7-3TU P7-3TE P8-3Ts P8-2Ts P8-2TU
Metrizyme	Proteolytic enzymes	< 2%	
WIP'ANIOS CLEAN'UP	Association of surfactants, excipients	/	P8-2Ts P8-2TU
Intercept™ Detergent	Diethylene glycol monoethyl ether, Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	1-5%	
TEEZyme	Ethoxylated Alcohols	0.1-1%	XP8-2TU
	Proteolytic enzymes	0.1-1%	
	Amylase	0.1-0.5%	
TEEZyme Sponge	Proteolytic enzymes	0.1-1%	

4.2.2 Cleaning Procedure

1. Select an appropriate cleaner include cleaning wipes and sprays, mild detergents, enzymatic cleaners and specially designed enzymatic sponges.
2. Follow the cleaner manufacturer’s instructions to prepare and use the cleaner. Select an appropriate method:
   - Soaking: Soak the probe in the cleaner solution for a duration according to the cleaner manufacturer's instructions. Wipe and wash the probe surface gently by using a piece of lint-free soft cloth or soft sponge until no dirt is visible. When necessary, wash the locating groove and other items by using disposable cotton swabs.

     Avoid using a brush to wash the lens because it may damage the probe.

     Only the section from distal end to the 100 cm marker (70 cm for pediatric TEE probe) on the flexible shaft can be immersed in the cleaner solution. The handle, cable and connector can only be cleaned with a wrung out soft cloth moistened with cleaners.
   - Wiping: Use a commercially available cleaning wipe, cleaning sponge, or a soft cloth soaked with a cleaning spray to wipe and clean all surfaces of the probe thoroughly for at least 1 minute or follow the cleaner manufacturer's instructions until the probe is clean. When necessary, wash the locating groove and other items by using disposable cotton swabs.
3. Rinse the probe insertion part thoroughly with plenty of clean flowing water (about 7.5L) at room temperature for about 1 minute to remove the residual dirt and cleaning solvent. Or follow the rinsing method specified by the cleaner manufacturer. Use moistened soft cloth to wipe the residual cleaners on the handle, cable, and connector.
4. Dry the probe with a piece of disposable lint-free soft cloth or tissue.

   Do not dry the probe by heating.
5. Inspect the probe. If visible dirt still exists, repeat the preceding steps to wash the probe until it is all clean.

4.3 Disinfection

Only the following disinfectants are recommended by Mindray to disinfect the TEE transducers. For the biological effectiveness and the correct use of the disinfectants, see the information of the disinfectants’ manufacturer.

4.3.1 Compatible Disinfectants

Disinfectant	Active ingredient	Concentration	Applicable for
Cidex (applicable for FDA region only)	Glutaraldehyde	2.4%	P7-3T P7-3Ts
Metricide	Glutaraldehyde	2.60%	P7-3TU
Metricide 28	Glutaraldehyde	2.50%	P7-3TE
Wavicide 01	Glutaraldehyde	2.65%	P8-3Ts P8-2Ts P8-2TU

Disinfectant	Active ingredient	Concentration	Applicable for
Metricide Plus 30	Glutaraldehyde	3.40%	P7-3T P7-3Ts P7-3TU P7-3TE P8-3Ts
CIDEX® OPA (applicable for FDA region only)	Ortho-phthalaldehyde	0.55%	P7-3T P7-3Ts
Metricide OPA Plus (applicable for FDA region only)	Ortho-phthalaldehyde	0.60%	P7-3TU P7-3TE P8-3Ts P8-2Ts P8-2TU XP8-2TU
Revital-Ox® Resert® HLD	Hydrogen Peroxide	1.4-2.3%	P7-3T P7-3Ts P7-3TU P7-3TE P8-3Ts XP8-2TU
	2-Furoic Acid	≤2.50	
UltrOx™ HLD	Hydrogen Peroxide	1.4-2.3%	
	2-Furoic Acid	≤2.50	
Rapicide OPA-28	Ortho-phthalaldehyde	0.575%	P8-2Ts P8-2TU
TD-8	Ortho-phthalaldehyde	0.59%	XP8-2TU

4.3.2 Disinfection Procedure

1. Select an appropriate high-level disinfectant to disinfect the probe. Follow the disinfectant manufacturer's instructions to use the high-level disinfectant. Prepare a disinfectant by using sterile distilled or softened water when necessary.
2. Select an appropriate method:
   - Soaking: Soak the probe in the disinfectant solution and shake the probe properly to remove bubbles on the surface of the probe. For the probe soaking duration, see the disinfectant manufacturer's instructions.

     Only the section from distal end to the 100 cm marker (70 cm for pediatric TEE probe) on the flexible shaft can be immersed in the disinfectant solution. The handle, cable and connector can only be disinfected with a wrung out soft cloth moistened with disinfectants.
   - Wiping: Use a commercially available disinfecting wipe, or a disposable sterile lint-free soft cloth soaked with a disinfecting spray to wipe and disinfect all surfaces of the probe thoroughly for the time specified in the disinfectant manufacturer's instructions.

3. Rinse the probe insertion part thoroughly with plenty of clean flowing water (about 7.5L) at room temperature for about 1 minute to remove the residual dirt and disinfectants. Or follow the rinsing method specified by the disinfectant manufacturer. Use moistened soft cloth to wipe the residual disinfectants on the handle, cable, and connector.
4. Dry the probe with a piece of disposable lint-free soft cloth or tissue.

   Do not dry the probe by heating.
5. Check whether the probe has defects such as peeling, rifts, bumps, cracks, or liquid spill. If such defects exist, the probe has reached the end of its service life. In this case, stop using it and contact the Mindray service department.
6. Store the probe in a cool and dry environment.

⚠ CAUTION

- **The lens may be discolored; the label on the transducer may fade. These are not abnormalities.**
- **Repeated disinfection will eventually damage the transducer, please check the transducer's performance periodically.**
- **Disinfecting incorrectly or with chemicals not recommended by Mindray will void the warranty.**

⚠ WARNING

To avoid injury to the patient, if residue from the disinfectant is not removed it can cause irritation and/or burning of the mouth and esophageal tissue.

4.4 Recommended Automated Reprocessor (AR)

The AR devices can be used for automated probe cleaning and (or) disinfection.

NOTE:

- This guide details only the manual cleaning and disinfection of probes. Refer to the accompanying instructions for detailed operation information of an AR, such as reprocessing conditions.
- For the AR that claims only disinfectants, manual cleaning is required prior to automated disinfection.
- To purchase an AR, contact the AR manufacturer.

The recommended ARs are as follows:

Model	Manufacturer	Compatible Reagents	Compatible Probes
ASTRA TEE®	CIVCO Medical Solutions	Cidex OPA	P7-3T/P7-3Ts/P7-3TU/P7-3TE/P8-3Ts/P8-2Ts/P8-2TU/XP8-2TU
		Metricide OPA Plus	
		Revital-Ox® Resert® HLD	P7-3T/P7-3Ts/P7-3TU/P7-3TE/P8-3Ts/XP8-2TU
		UltrOx™ HLD	
Advantage Plus™	Steris (Medivators)	Intercept™ Detergent	P8-2Ts/P8-2TU
		Rapicide™ PA HLD	P8-2Ts/P8-2TU/P8-3Ts/XP8-2TU

5 Cleaning and Sterilizing the Laparoscopic Probe

This section describes the methods and precautions for cleaning and sterilization of laparoscopic probes. After completing each examination, clean, sterilize the laparoscopic probes as required. If necessary, repeat the cleaning, sterilization process before next use.

⚠ WARNING

- **Keep the control handle and system connector out of any cleaning or sterilant solutions. The control handle and cable may be cleaned with a damp cloth, but only the distal end of the transducer up to the hard shaft (under the strain relief) may be placed into a sterilant solution.**
- **To avoid injury to the patient, you must follow the manufacturer's recommendation for rinsing.**
- **If the probe is not cleaned and sterilized, it may become the source of infection.**

⚠ CAUTION

- **To avoid damaging the transducer, the transducer should not be exposed to the sterilant longer than specified to achieve the desired effect.**
- **To avoid damaging the transducer, do not immerse the transducer in a solution containing ethanol.**
- **After sterilization, rinse the transducer thoroughly with sterile distilled water to remove all chemical residues. Chemical residues on the transducer may be harmful to the human body.**
- **The laparoscopic probe, as a critical probe, must undergo cleaning and sterilization completely after each use.**

NOTE:

- After the examination, wipe off the ultrasound gel thoroughly, otherwise, the ultrasound gel may solidify and degrade the image quality of the transducer.
- Do not permit the transducer to become overheated (more than 55°C) during cleaning and sterilization. High temperature may cause the transducer to become deformed or damaged.

5.1 Before Processing

This step is to remove the ultrasound gel or other visible dirt.

Perform the following procedure:

1. Wear protective devices such as surgical caps, masks, gloves, goggles or face shield, and dedicated lab suit when cleaning and sterilizing the laparoscopic probe.
2. After using the probe, freeze the image, power off the ultrasound system, and disconnect the probe from the ultrasound system, to prevent data loss due to hot plug. If the sheath is used, take off the sheath and dispose it as directed by the hospital. Cleaning and sterilization are required even if the sheath is used.
3. Wipe away the ultrasound gel or other visible dirt on the surface of the probe by using a damp piece of disposable lint-free soft cloth or tissue.
4. Place the contaminated probe in probe container and transport it to the decontamination room. During transportation, avoid colliding or squeezing the probe. Do not touch the acoustic head with heavy objects. Keep the probe moist during transportation to prevent body fluid from drying up on the probe surface. If cleaning cannot be performed immediately, immerse the insertion part of the probe in the detergent or water to avoid drying for more than 30 minutes.

   The probe must be placed along the placement guide line that is laser carved at the bottom of the probe container. To order the probe container, contact Mindray.

   If users select its own probe container, refer to the following dimension of the Mindray customized probe container:

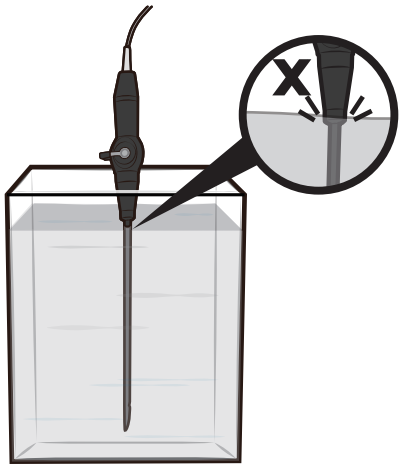
   624 ±2 mm (length) * 340 ±1 mm (width) *75±1 mm (height)

5.2 Cleaning

Perform the following procedure:

1. Select an appropriate cleaner. For details, see "5.4.1 Validated Cleaner and Sterilant/ Sterilization System".
2. Follow the cleaner manufacturer’s instructions to prepare and use the cleaner. Select an appropriate method:
3. Clean the insertion part: soak the probe insertion part thoroughly in the cleaner solution for at least 5 minutes or follow the cleaner manufacturer's instructions.
4. Wipe and wash the probe surface gently by using a piece of lint-free soft cloth or soft sponge until no dirt is visible. When necessary, wash the locating groove and other items by using disposable cotton swabs. Avoid using a brush to wash the lens because it may damage the probe.

   Only the section from the distal end to the part under the handle (probe insertion part) can be immersed in the cleaner solution. The handle, cable and connector can only be cleaned with a wrung out soft cloth moistened with cleaners.



5. Clean other parts (except for the insertion part): use a disposable soft cloth soaked with cleaner solution and screw it dry until no liquids drip to wipe the strain relief, control handle, deflection lever, cable, and probe connector for at least 1 minute or follow the cleaner manufacturer's instructions until the probe is clean.

   Avoiding touching the internal pins of the connector with any cleaner.

6. Rinse the probe insertion part thoroughly with plenty of clean flowing water (about 7.5L) at room temperature for about 1 minute to remove the residual dirt and cleaner solution. Or follow the rinsing method specified by the cleaner manufacturer. Use moistened dust-free soft cloth to wipe the residual dirt or cleaners on the parts except for the insertion part.
7. Dry the probe with a disposable lint-free soft cloth or tissue.

   Do not dry the probe by heating.

8. Inspect the probe. If visible dirt still exists, repeat the preceding steps to clean the probe until it is all clean.
9. Check whether the probe has defects such as peeling, rifts, bumps, cracks, or liquid spill. If such defects exist, the probe has reached the end of its service life. In this case, stop using it and contact the Mindray service department.

5.3 Sterilization

NOTES:

- Clean the probe thoroughly in accordance with the cleaning procedure before sterilization.
- Sterilization using systems or sterilant both can achieve sterilization effect. You can select an appropriate sterilization method as required.

5.3.1 Sterilization using Sterilization System

This chapter only introduces the basic operation procedures of the sterilization system. For details about using the sterilization system, refer to the sterilization system manufacturer's instructions.

Sterilization using V-PRO Low Temperature Sterilization System

Perform the following procedure:

1. Place the probe into a clean probe container and wrap the probe container including probe with sterilization wrap which had already cleared by the authorities such as H600 OneStep® sterilization wrap.
2. Start the V-PRO Low Temperature Sterilization System using the Non Lumen Cycle according to the instructions provided by the sterilization system manufacturer.
3. Keep the sterilization wrap together with other sterilized surgical instruments in a sterile item storage area.
4. Before next use, check whether the probe has defects such as peeling, rifts, bumps, cracks, or liquid spill. If such defects exist, the probe has reached the end of its service life. In this case, stop using it and contact the Mindray service department.

Sterilization using STERRAD Low Temperature Sterilization System

Perform the following procedure:

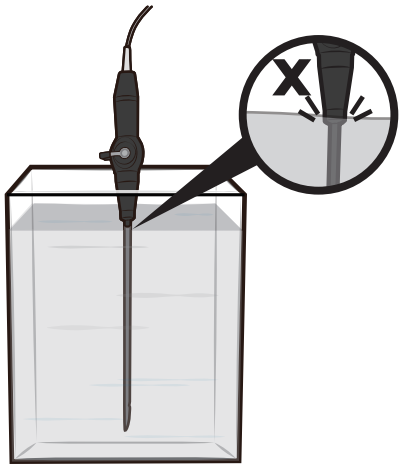
1. Place the probe into a clean probe container and wrap the probe container including probe with sterilization wrap which had already cleared by the authorities such as Halyard Health Sterilization Wrap H400.
2. Start the STERRAD Low Temperature Sterilization System using the STANDARD Cycle according to the instructions provided by the sterilization system manufacturer.
3. Keep the sterilization wrap together with other sterilized surgical instruments in a sterile item storage area.
4. Before next use, check whether the probe has defects such as peeling, rifts, bumps, cracks, or liquid spill. If such defects exist, the probe has reached the end of its service life. In this case, stop using it and contact the Mindray service department.

5.3.2 Sterilization using Solution

Perform the following procedure:

1. Select an appropriate sterilant to sterilize the probe. For detail, see "5.4.1 Validated Cleaner and Sterilant/Sterilization System".
2. Follow the sterilant manufacturer's instructions to prepare and use the sterilant. Prepare a sterilant by using sterile distilled or softened water when necessary.
3. Soak the probe insertion part in the sterilant solution and shake the probe properly to remove bubbles on the surface of the probe. For the probe soaking duration, see the sterilant manufacturer's instructions.

   Only the section from the distal end to the part under the handle (probe insertion part) can be immersed in the sterilant solution. The handle, cable and connector can only be sterilized with a wrung out soft cloth moistened with sterilant.



4. Rinse the probe insertion part thoroughly with plenty of sterile distilled water (about 7.5L) at room temperature for about 1 minute to remove the residual sterilant. Or follow the rinsing method specified by the sterilant manufacturer.
5. Dry the probe with a piece of disposable sterile lint-free soft cloth.

   Do not dry the probe by heating.
6. Check whether the probe has defects such as peeling, rifts, bumps, cracks, or liquid spill. If such defects exist, the probe has reached the end of its service life. In this case, stop using it and contact the Mindray service department.
7. Store the probe in the sterilized probe container.

   If necessary, repeat the cleaning, sterilization process before next use.

CAUTION

- **The lens may be discolored; the label on the transducer may fade. These are not abnormalities.**
- **Repeated sterilization will eventually damage the transducer, please check the transducer's performance periodically.**
- **Sterilizing incorrectly or with chemicals not recommended by Mindray will void the warranty.**

5.4 List of Cleaner, Disinfectant and Sterilant/Sterilization System

The manual release time is different from the version update time of the Mindray product, so the list in this manual may not be the latest version. If you cannot find the information in this list, contact Mindray Customer Service Department or sales representative.

5.4.1 Validated Cleaner and Sterilant/Sterilization System

Only the following cleaners, and sterilant/sterilization system are validated by Mindray to clean and sterilize the laparoscope transducers. For the biological effectiveness and the correct use, see the information of the cleaners, and sterilant/sterilization system manufacturers.

Cleaner

Item	Active ingredient	Concentration
MetriZyme	Proteolytic enzymes	< 2%
Liquinox	Benzenesulfonic acid, mono-C10-16-alkyl derivs., sodium salts	10-30%
	Alcohols, C12-14-secondary, ethoxylated	3-7%
Prolystica 2X Concentrate Enzymatic Cleaner	Ethanolamine	1-5%
	Protease	0.1-1%
	Ethoxylated alcohol	1-5%
	Polyalkylene glycol	1-5%
	Glycerine	1-5%
DDN9	N PROPIONATE ,N-DIDECYL—N-METHYL-POLY{OXYETHYL)AMMONIUM	2.5≤X%<10
	TETRAPOTASSIUM ETHYLENEDIAMINETETRAACETATE	2.5≤X%<10
	EDETIC ACID (EDTA)	0≤X%<2.5

Sterilant

Item	Active ingredient	Concentration
Cidex Activated Dialdehyde Solution	Glutaraldehyde	2.4%

Sterilization System

Item	Cycle
V-PRO Low Temperature Sterilization System	Non Lumen Cycle
STERRAD™ 100NX Sterilizer with ALLClear™ Technology	STANDARD Cycle

5.4.2 Material Compatible Disinfectant

Item	Active ingredient	Concentration
Anioxyde 1000	Hydrogen peroxide	3%
Anios Clean Excel D	Alcohols, C8-10, ethoxylated	≥ 5 - < 10
	Didecyl Dimethyl Ammonium Chloride	≥ 5 - < 10
	Isopropyl Alcohol	≥ 2.5 - < 5
Bodedex Forte	propane-1,2-diol	≥ 10 - < 20
	Tridecanol, branched, ethoxylated	≥ 3 - < 10
	Alcohols, C12-14. ethoxylated	≥ 3 - < 10
	Quaternary ammonium compounds, [2-[[2-[(2- carboxyethyl)(2-hydroxyethyl) am i no]ethyl]am i no]-2-oxoethyl]coco alkyldimethyl, hydroxides,	≥ 1 - < 2,5
Cidex OPA™	Ortho-phthalaldehyde	0.55%

Item	Active ingredient	Concentration
Gigasept AF	Didecyldimethylammoniumchloride	15%
	Glycine, aminoalkyl derivs	6.9%
	Tridecylpolyethyleneglycolether	15-30%
	N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine	< 5%
Korsolex Extra	Glutaral	≥ 5 - < 10
	Formaldehyde	≥ 5 - < 10
	(ethylenedioxy)dimethanol	≥ 3 - < 10
	Propan-2-ol	≥ 1 - < 10
	Octan-1-ol, ethoxylated	≥ 3 - < 5
	Tridecanol, branched, ethoxylated	≥ 3 - < 10
	[[(2-hydroxyethyl)imino]bis(methylene)] bisphosphonic acid	≥ 1 - < 2,5
	Didecyldimethylammonium chloride	≥ 1 - < 2,5
	Alkyl (C12-18) dimethylbenzyl ammonium chloride (ADBAC (C12-18))	≥ 1 - < 2,5
	N-(2-ethylhexyl)-3,5,5-trimethylhexanamide	≥ 0,25 - < 1
Perasafe	Sodium Perborate	40-60%
Revital-Ox® Resert® High Level Disinfectant	Hydrogen Peroxide	1.4-2.3%
	2-Furoic Acid	≤2.50
UltrOx™ High-Level disinfectant	Hydrogen Peroxide	1.4-2.3%
	2-Furoic Acid	≤2.50
Sani Cloth HB	Alkyl dimethyl benzyl ammonium chloride	0.07%
	Alkyl dimethyl ethylbenzyl ammonium chloride	0.07%
Sekusept Aktiv	odium Percarbonate	30 - 50%
	Citric acid	10 - 20%
	sodium carbonate	2 - 5%
Tristel Trio	Propan-2-OL	1-10%
	Polymeric Biguanide Hydrochloride	< 1%
	5-Chloro-2-Isothiazol-3-one	< 1%
	2-Methyl-2H-Isothiazol-3-O Chlorinedioxide	< 1%
	Sodiumchlorite 100%	< 1%
Virex II 256	Didecyl dimethyl ammonium chloride	8.704%
	n-Alkyl dimethyl benzyl ammonium chloride	8.19%

NOTE

These disinfectants are only compatible with the probe materials, but the efficacy of realizing the appropriate level of disinfection has not been validated by Mindray.

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6 Cleaning and Sterilizing the Needle-guided Bracket

NOTE:

Disposable components are packaged sterile and are single-use only. Do not use if integrity of packaging is violated or if expiration date has passed. Please use the disposable components compliant with the relevant local regulations.

⚠ CAUTION

- **Needle-guided brackets whose name starts with NGB are reusable, and need thorough cleaning and sterilization before and after each biopsy.**
- **Follow local regulations when selecting and using the disinfectant.**
- **Repeated sterilization may degrade the safety and performance of the needle-guided bracket. Before use, please check whether the needle-guided bracket has defects such as deformation and rusting. If such defects exist, the bracket has reached the end of its service life. In this case, stop using it and contact the Mindray service department.**
- **It is recommended to use immersion sterilization for plastic needle-guided brackets and high-pressure steam sterilization for metal needle-guided brackets.**
- **For detailed operations about the cleaning solvent, sterilant and high-temperature steam sterilizer, see the respective operator's manuals provided by the cleaning solvent, sterilant and high-temperature steam sterilizer manufacturer.**

6.1 Cleaning

Perform the following procedure:

1. Wear a pair of gloves to prevent infection.
2. After use, immerse the needle-guided bracket in clean water immediately to prevent dirt from drying. Wipe the entire surface of the needle-guided bracket by using a piece of disposable lint-free soft cloth to remove coarse dirt.
3. Prepare a cleaning solvent (enzymatic or neutral pH detergent, e.g., liquinox, MetriZyme) by using clean water in accordance with the operator's manual provided by the cleaner manufacturer.
4. Detach all the detachable parts of the needle-guided bracket and immerse the needle-guided bracket and all its parts fully in the cleaning solvent for at least 1 minute or a period specified by the cleaner manufacturer.

5. Immerse the needle-guided bracket and all its parts fully in the cleaning solvent. Wipe and wash the surface and connecting parts of the needle-guided bracket gently by using a soft brush until no dirt is visible. Place the needle-guided bracket inside an ultrasonic cleaner and perform ultrasonic cleaning for 3–5 minutes.
6. Rinse the needle-guided bracket thoroughly by using a large amount of clean water (about 7.5 L/2 gallons) at room temperature for about 1 minute to remove the residual dirt and cleaning solvent.
7. Wipe away the water on the needle-guided bracket by using a piece of disposable lint-free soft cloth.
8. Inspect the needle-guided bracket. If visible dirt still exists, repeat the preceding steps to wash the bracket until it is all clean.

6.2 Sterilization

6.2.1 Sterilization with a Sterilant

Perform the following procedure:

1. Wear a pair of gloves to prevent infection.
2. Clean thoroughly in accordance with the cleaning procedure before sterilization.
3. Prepare a sterilant by using sterile distilled or softened water when necessary.

Table 6-1 Recommended sterilization solution

Chemical name	Trade name	Procedures
Glutaraldehyde (2.4%)	Cidex Activated Dialdehyde Solution (applicable for FDA region only)	Refer to the instructions provided by the sterilant manufacturer for details.
22% Hydrogen Peroxide 4.5% Peroxyacetic Acid	Minncare liquid disinfectant (applicable for Canada only)	
Glutaraldehyde (2.6%)	Metricide	

4. Immerse the needle-guided bracket fully in the sterilant and shake the bracket appropriately to remove any bubbles on the surface. Use a syringe to draw an appropriate amount of sterilant and inject the sterilant into the hole to remove the bubbles inside the hole if necessary.

   For details about the immersion duration, see the operator's manual provided by the sterilant manufacturer.
5. After sterilization, wash the needle-guided bracket thoroughly by using a large amount of sterile distilled water (about 7.5 L/2 gallons) at room temperature for about 1 minute to remove the residual sterilant.
6. Dry the needle-guided bracket with a piece of sterile disposable lint-free soft cloth.
7. Store the needle-guided bracket in a cool, clean and dry environment.

6.2.2 High-Pressure Steam Sterilization

Perform the following procedure:

1. Wear a pair of gloves to prevent infection.
2. Clean thoroughly in accordance with the cleaning procedure before sterilization.

3. Package the needle-guided bracket in accordance with the sterilization requirements of surgical instruments.
4. Place the packaged needle-guided bracket inside a high-temperature steam sterilizer and perform sterilization. The sterilization parameters are 121 °C and 30 minutes for a gravity displacement steam sterilizer and are 132 °C and 4 minutes for a dynamic-air-removal steam sterilizer.
5. Take out the sterilization package after sterilization and dry it in an oven at 60 °C for 20 minutes to 30 minutes.

   Keep the sterilization package together with other sterilized surgical instruments in a sterile item storage area.

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7 Cleaning and Disinfecting the Main Unit

7.1 Cleaning

⚠ WARNING

Before cleaning the main unit, be sure to turn off the power and disconnect the power cord from the outlet. If you clean the system while the power is "On", it may result in electric shock.

Especially, ME series/TE series/Hepatus series ultrasound system have passed puncture test and leakage current test, and thus can be cleaned in power-on status.

⚠ CAUTION

Do not spill water or other liquid into the system while you perform the cleaning. Otherwise it may result in malfunction or electric shock.

NOTE:

- Do not use chemical solvents, or acid or alkaline solution to clean the main unit.
- Do not use hydrocarbon glass cleaner or cleaner for OA (Office Automation) equipment to clean the monitor. These substances may cause deterioration of the monitor.
- Use a soft brush to brush away dust attached to all visible sockets or interfaces (such as probe sockets, sockets or interfaces in the I/O panel and power supply panel). Do not use a cloth moistened with water.
- Keyboard on the control panel should be cleaned periodically, otherwise, keys may be blocked by dirt and buzzer dings, and thus keys don't work.

7.1.1 Cleaning the Display

Perform the following steps to clean the display of ultrasound system (including monitor and touch screen).

1. Power off and unplug the system.
   - For TE series/Hepatus series ultrasound system, you can clean the monitor in power-on status: tap  in the top-right corner of the screen and select  to lock the system for 10 seconds while the power is "On".
   - For ME series ultrasound system, you can clean the touch screen in power-on status: tap > bar in the left side of the touch screen to enter exam main menu, and select to lock the system for 10 seconds while the power is "On".
2. Wear medical gloves.

3. Clean the display surface with a soft dry cloth. Remaining stains should be wiped away using a cloth with a little neutral detergent or clean water and then leave the display to air dry.

   Do not dry the display by heating.

   For disinfection information, see "7.2 Disinfection".

7.1.2 Cleaning the Control Panel

Perform the following steps to clean the control panel.

1. Power off and unplug the system.

   For ME series ultrasound system, you can clean the control panel in power-on status: tap > bar in the left side of the touch screen to enter exam main menu, and select to lock the system for 10 seconds while the power is “On”.

2. Wear medical gloves.
3. Wipe the surface of control panel (including keys, buttons and sliders) with dry and soft cloth. Or wipe off difficult-to-remove soils by using soft cloth dampened with a bit of mild soapy water, and wipe the surface with dry and soft cloth or allow it to air dry. If it is difficult to clean the operation panel, remove the encoder caps, and then clean it with mild soapy water.
4. Allow the control panel to air dry.

   Do not dry the control panel by heating.

   For disinfection information, see "7.2 Disinfection".

7.1.3 Cleaning the Cover

Perform the following steps to clean the cover.

1. Power off and unplug the system.

   TE series/Hepatus series ultrasound system has passed puncture test and leakage current test, and thus can be cleaned in power-on status. In power-on status, tap in the top-right corner of the screen and select to lock the system for 10 seconds.

2. Wear medical gloves.
3. Use a soft dry cloth to clean the system’s cover. If the system is dirty, moisten the soft cloth with neutral soapy water to wipe away any stains.
4. Allow the cover to air dry.

   Do not dry the cover by heating.

   For disinfection information, see "7.2 Disinfection".

7.1.4 Cleaning Other Parts

For details on cleaning other parts of the main unit, such as trackball and dust-proof cover, refer to the basic volume of ultrasound system operator’s manual.

7.2 Disinfection

⚠ WARNING

- **Before disinfecting the main unit, be sure to turn off the power and disconnect the power cord from the outlet. Disinfecting the main unit while the power is "On" may result in electric shock.**

  Especially, ME series ultrasound system equipped with trackpad, TE series and Hepatus series ultrasound system have passed puncture test and leakage current test, and thus can be disinfected in power-on status.
- **Use only Mindray approved disinfectants and methods listed in this section to disinfect the main unit. Warranty does not cover damage caused by unapproved substances or methods.**
- **Do not mix disinfectants, as hazardous gases may result.**
- **We make no claims regarding the efficacy of the listed chemicals or methods as a means for controlling infection. For the method to control infection, consult your hospital's infection control officer or epidemiologist.**

⚠ CAUTION

- **Never immerse any part of the main unit in liquids or allow liquid to enter the interior.**
- **Any contact of disinfectants with connectors or metal parts may cause corrosion.**
- **Do not pour or spray any liquid directly on the main unit or permit fluid to seep into connections or openings. If you spill liquid on the main unit, disconnect the power supply, dry the main unit, and contact your service personnel.**
- **Never use abrasive materials (such as steel wool or silver polish), or erosive cleaners (such as acetone or acetone-based cleaners).**
- **Dilute and use the disinfectants according to the disinfectant manufacturer's instructions.**
- **Check the system after cleaning and disinfection. If there is any sign of damage, remove it from use.**

NOTE:

- Disinfectants listed in this section are used for disinfecting the housing of the main unit and the monitor only, not for disinfecting the probes.
- Wear medical gloves to prevent transfer of soils and infection.
- Follow local regulations when selecting and using the disinfectant.

Different types of ultrasound systems (such as cart-based, hand-carried and touch screen) vary in materials of cover, display and control panel, and thus their resistance to disinfectants are different. Therefore, different ultrasound systems are compatible with different disinfectants.

Currently, except for the product listed in 7.2.1, other products can not be disinfected.

7.2.1 Identifying the Areas That can be Disinfected

TE series/Hepatus series ultrasound system

The main unit cover and monitor of the ultrasound system can be disinfected. For details, see the areas highlighted in gray color in Figure 7-1 and Figure 7-2.

Do not disinfect handle, or any visible sockets or interfaces (such as probe sockets, ventilation holes, dust-proof cover, loudspeaker, sockets or interfaces in the I/O panel and power supply panel).

Figure 7-1 Areas that can be disinfected of TE series with 15-inch screen (highlighted in gray color)

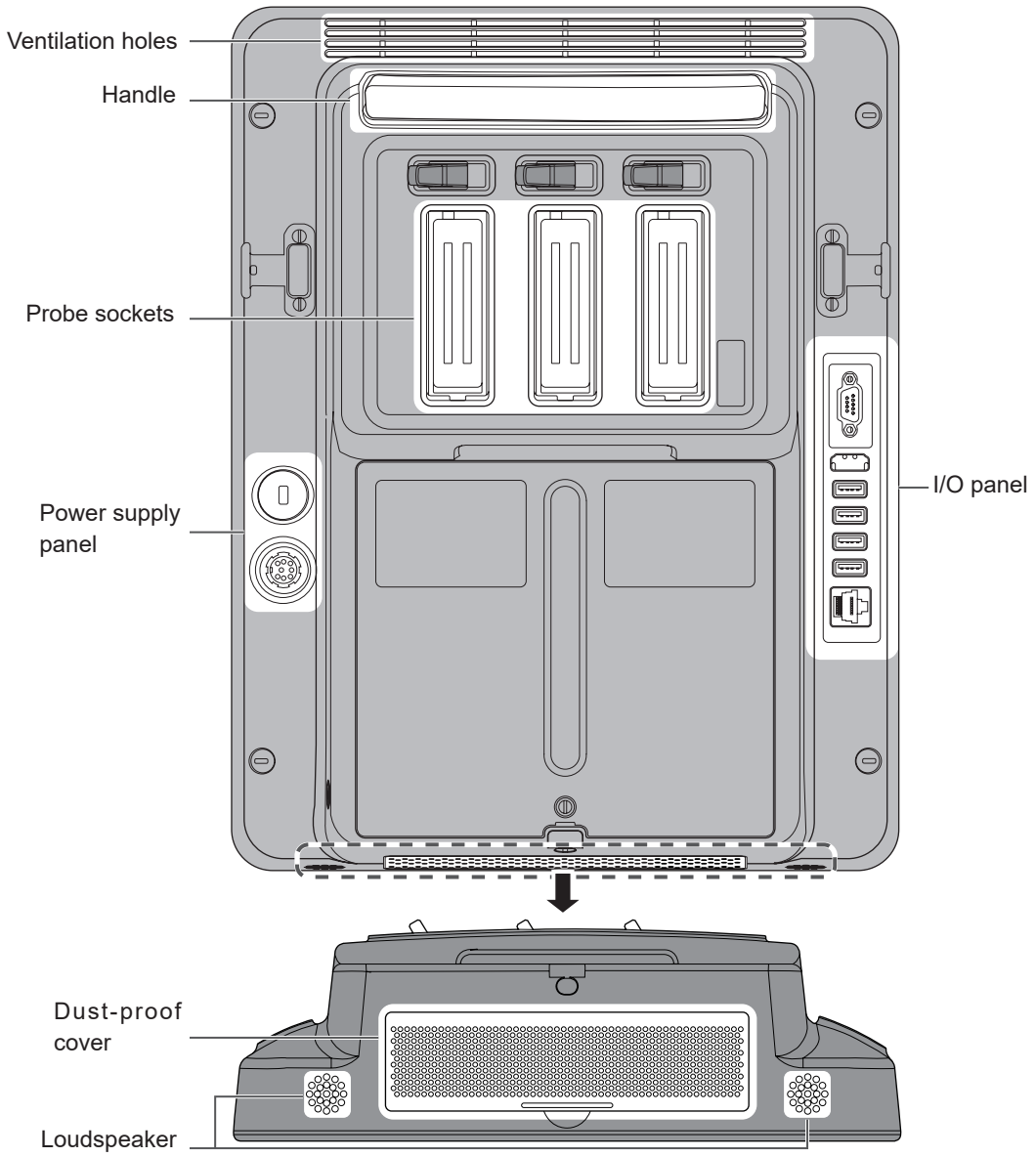


Table 7-1 Compatible Disinfectants for TE series (15-inch screen) and Hepatus series

Trade name	Manufacturer	Type	Remarks
Cleanisept Wipes	Dr.Schumacher GmbH	Wipe	/

Trade name	Manufacturer	Type	Remarks
Clinell Universal wipes/Clinell® Surface Wipes	GAMA Healthcare Ltd.	Wipe	/
Hydrogen peroxide	/	Solution	Concentration 3%
Medical alcohol	/	Solution	Concentration 75%
Mikrobac Tissues	Bode Chemie Gmbh	Wipe	/
mikrozid® AF Wipes	SchÜlke & MayrGmbh	Wipe	/
Protex Disinfectant Spray	Parker Laboratories, Inc.	Spray	/
protex™ ultra disinfectant wipes	Parker Laboratories, Inc.	Wipe	/
Sani-Cloth® AF3	Professional Disposables International Inc	Wipe	/
SANI-CLOTH® BLEACH GERMICIDAL DISPOSABLE WIPE	Professional Disposables International Inc	Wipe	/
Sani-Cloth® Plus	Professional Disposables International Inc	Wipe	/
Schulke mikrozid® Sensitive Wipes	SchÜlke & Mayr GmbH	Wipe	/
Sodium hypochlorite	/	Solution	Concentration 0.5%
SONO™ ULTRASOUND WIPES	Advanced Ultrasound Solutions Inc.	Wipe	/
Virex II 256	Diversey, Inc	Solution	/
VIREX TB	Diversey, Inc	Solution	/
WIP'ANIOS CLEAN'UP	Anios Laboratoires	Wipe	/
WIP' ANIOS Premium	Anios Laboratoires	Wipe	/
WIP' ANIOS SPOR' ACTIV	Anios Laboratoires	Solution	/

Figure 7-2 Areas that can be disinfected of TE series with 21.5-inch screen (highlighted in gray color)

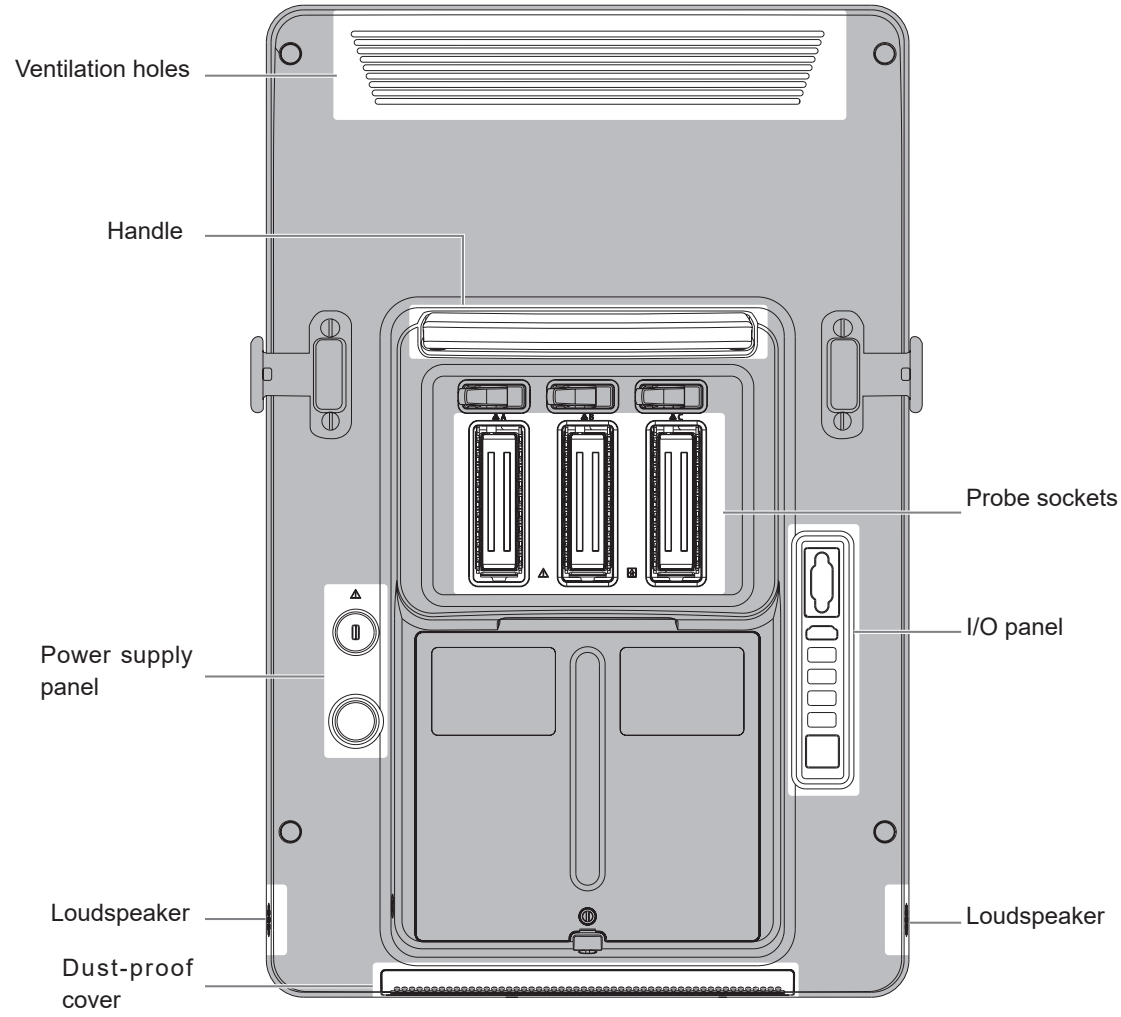


Table 7-2 Compatible Disinfectants for TE series (21.5-inch screen)

Trade name	Manufacturer	Type	Remarks
CAVIWIPES	Metrex Research	Wipe	/
Cleanisept Wipes	Dr.Schumacher GmbH	Wipe	/
Clinell Universal wipes/Clinell® Surface Wipes	GAMA Healthcare Ltd.	Wipe	/
Hydrogen peroxide	/	Solution	Concentration 3%
Isopropyl alcohol	/	Solution	Concentration 70%
Medical alcohol	/	Solution	Concentration 75%
Mikrobac Tissues	Bode Chemie Gmbh	Wipe	/
Protex Disinfectant Spray	Parker Laboratories, Inc.	Spray	/
protex™ ultra disinfectant wipes	Parker Laboratories, Inc.	Wipe	/

Trade name	Manufacturer	Type	Remarks
SANI-CLOTH® BLEACH GERMICIDAL DISPOSABLE WIPE	Professional Disposables International Inc	Wipe	/
Sani-Cloth® Plus	Professional Disposables International Inc	Wipe	/
Sani-Cloth® Prime GERMICIDAL DISPOSABLE WIPE	Professional Disposables International Inc	Wipe	/
Schulke mikrozid® Sensitive Wipes	SchÜlke & Mayr GmbH	Wipe	/
Sodium hypochlorite	/	Solution	Concentration 0.5%
SONO™ ULTRASOUND WIPES	Advanced Ultrasound Solutions Inc.	Wipe	/
Super Sani-Cloth®	Professional Disposables International Inc	Wipe	/
VIREX TB	Diversey, Inc	Solution	/
WIP'ANIOS CLEAN'UP	Anios Laboratoires	Wipe	/
WIP' ANIOS Premium	Anios Laboratoires	Wipe	/

UMT-400&UMT-400Plus Trolley

Only the trolley handle (UMT-400 and UMT-400Plus) can be disinfected. Other parts (including the height adjusting lever) cannot be disinfected. The diagram of the UMT-400 is taken as an example.

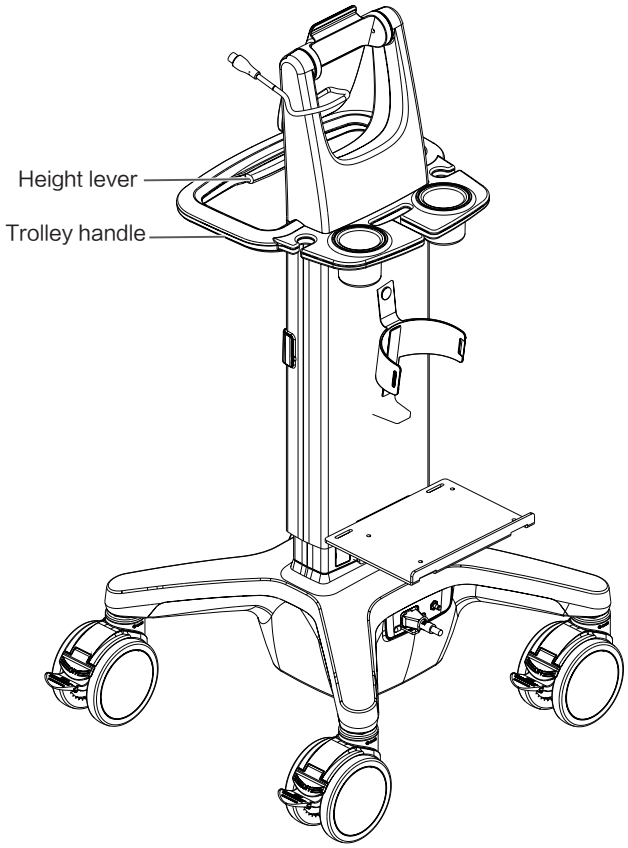


Table 7-3 Compatible Disinfectants for Trolley (UMT-400/UMT-400Plus)

Trade name	Manufacturer	Type	Remarks
CAVIWIPES	Metrex Research	Wipe	/
Cleanisept Wipes	Dr.Schumacher GmbH	Wipe	/
Clinell Universal wipes/Clinell® Surface Wipes	GAMA Healthcare Ltd.	Wipe	/
Hydrogen peroxide	/	Solution	Concentration 3%
Isopropyl alcohol	/	Solution	Concentration 70%
Medical alcohol	/	Solution	Concentration 75%
Mikrobac Tissues	Bode Chemie Gmbh	Wipe	/
Protex Disinfectant Spray	Parker Laboratories, Inc.	Spray	/
protex™ ultra disinfectant wipes	Parker Laboratories, Inc.	Wipe	/
SANI-CLOTH® BLEACH GERMICIDAL DISPOSABLE WIPE	Professional Disposables International Inc	Wipe	/
Sani-Cloth® Prime GERMICIDAL DISPOSABLE WIPE	Professional Disposables International Inc	Wipe	/

Trade name	Manufacturer	Type	Remarks
Sani-Cloth® Plus	Professional Disposables International Inc	Wipe	/
Schulke mikrozid® Sensitive Wipes	SchÜlke & Mayr GmbH	Wipe	/
Sodium hypochlorite	/	Solution	Concentration 0.5%
SONO™ ULTRASOUND WIPES	Advanced Ultrasound Solutions Inc.	Wipe	/
Super Sani-Cloth®	Professional Disposables International Inc	Wipe	/
WIP'ANIOS CLEAN'UP	Anios Laboratoires	Wipe	/
WIP' ANIOS Premium	Anios Laboratoires	Wipe	/
VIREX TB	Diversey, Inc	Solution	/

TEX series ultrasound system

The cover above the front handle and the monitor of the ultrasound system can be disinfected. For details, see Figure 7-3.

Do not disinfect trolley back handle, manufacturer logo, any visible sockets or interfaces (such as probe sockets, ventilation holes, loudspeaker, I/O interface and power supply panel).

Figure 7-3 Areas that can be disinfected of TEX series (highlighted in gray color)

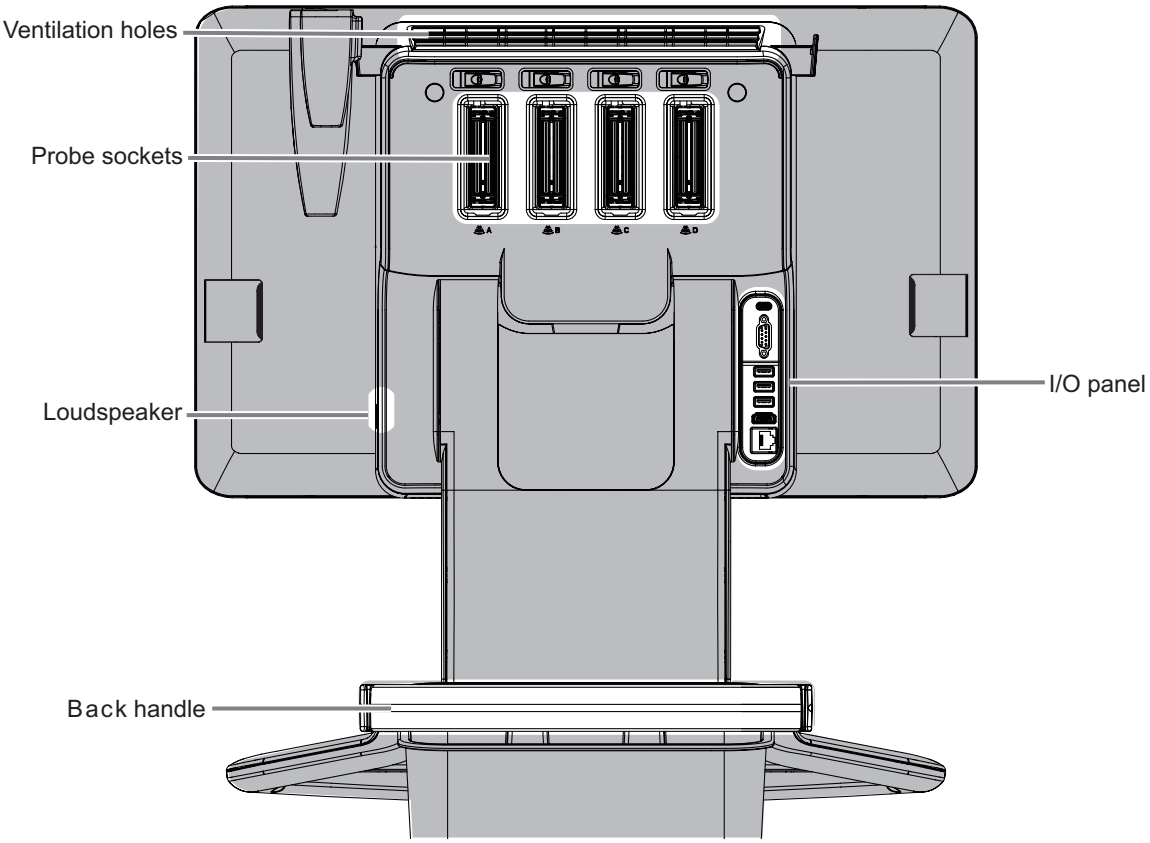


Table 7-4 Compatible Disinfectants for TEX series

Trade name	Manufacturer	Type	Remarks
CAVIWIPES	Metrex Research	Wipe	/
Cleanisept Wipes	Dr.Schumacher GmbH	Wipe	/
Clinell Universal wipes/Clinell® Surface Wipes	GAMA Healthcare Ltd	Wipe	/
Hydrogen peroxide	/	Solution	Concentration 3%
Isopropyl alcohol	/	Solution	Concentration 70%
Medical alcohol	/	Solution	Concentration 75%
Mikrobac Tissues	Bode Chemie Gmbh	Wipe	/
Oxivir® Tb Wipes	Diversey, Inc	Wipe	/
Protex Disinfectant Spray	Parker Laboratories, Inc.	Spray	/
protex™ ultra disinfectant wipes	Parker Laboratories, Inc.	Wipe	/
Sani-Cloth® AF3	Professional Disposables International Inc	Wipe	/
Sani-Cloth® HB	Professional Disposables International Inc	Wipe	/
SANI-CLOTH® BLEACH GERMICIDAL DISPOSABLE WIPE	Professional Disposables International Inc	Wipe	/
Sani-Cloth® Prime GERMICIDAL DISPOSABLE WIPE	Professional Disposables International Inc	Wipe	/
Sani-Cloth® Plus	Professional Disposables International Inc	Wipe	/
Schulke mikrozid® Sensitive Wipes	SchÜlke & Mayr GmbH	Wipe	/
SONO™ ULTRASOUND WIPES	Advanced Ultrasound Solutions Inc.	Wipe	/
Sodium hypochlorite	/	Solution	Concentration 0.5%
Super Sani-Cloth®	Professional Disposables International Inc	Wipe	/
Virex II 256	Diversey, Inc	Solution	/
VIREX TB	Diversey, Inc	Solution	/
WIP'ANIOS CLEAN'UP	Anios Laboratoires	Wipe	/
WIP' ANIOS Premium	Anios Laboratoires	Wipe	/

ME series ultrasound system with trackpad

The control panel, touch screen, and other parts can be disinfected. For details, see Figure 7-4.

Do not disinfect the top cover, bottom cover, side panels around the main unit, manufacturer logo, any visible sockets or interfaces (such as probe socket, ventilation holes, dust-proof cover, loudspeaker, sockets or interfaces in the I/O panel and power supply panel).

Figure 7-4 Areas that can be disinfected of ME series with trackpad (highlighted in gray color)



Table 7-5 Compatible Disinfectants for ME series with trackpad

Trade name	Manufacturer	Type	Remarks
Isopropyl alcohol	/	Solution	Concentration 70%
Medical alcohol	/	Solution	Concentration 75%
Mikrobac Tissues	Bode Chemie Gmbh	Wipe	/
Sani-Cloth® Plus	Professional Disposables International Inc	Wipe	/
Schulke mikrozid® Sensitive Wipes	SchÜlke & Mayr GmbH	Wipe	/
SONO™ ULTRASOUND WIPES	Advanced Ultrasound Solutions Inc.	Wipe	/

R9/R7/Resona 7 series ultrasound system

The control panel and related parts, including the touch screen, cable hook, intracavity probe holder, gel heater, and probe holder, can be disinfected. For details, see Figure 7-5.

Do not disinfect the visible connectors or sockets (for example, USB ports).

Figure 7-5 Areas that can be disinfected of R9/R7/Resona 7 series (highlighted in gray color)

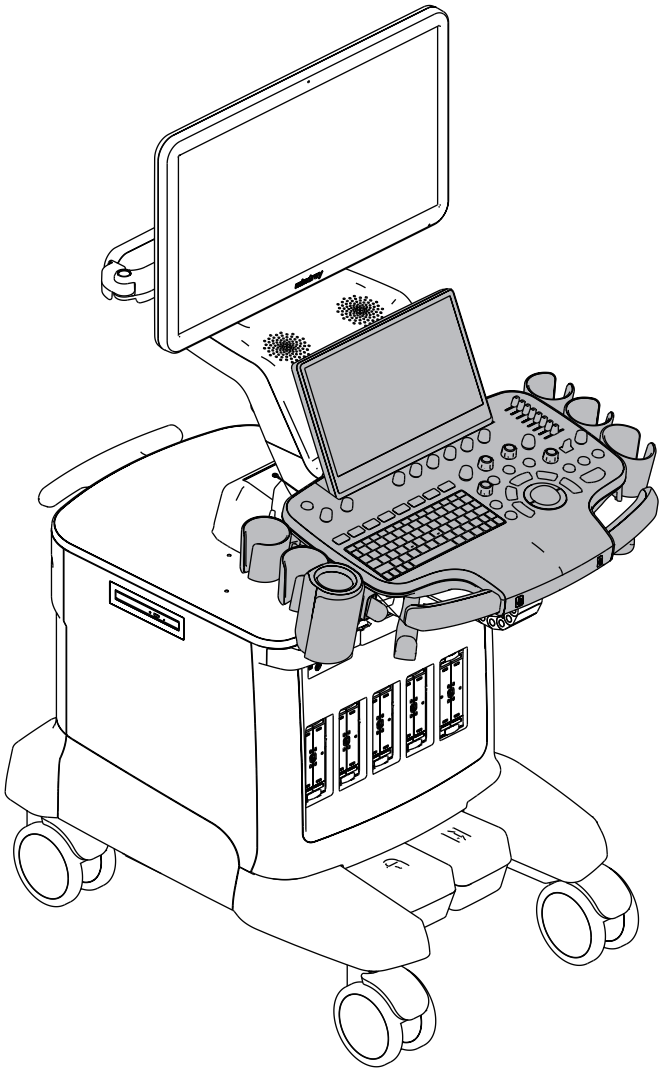


Table 7-6 Compatible Disinfectants for R9/R7/Resona 7 series

Trade name	Manufacturer	Type	Remarks
Caviwipes and Cavicide	Metrex	Wipe	/
Clorox Healthcare hydrogen peroxide wipes	Clorox Professional Products Company	Wipe	/
Oxivir® Tb Wipes	Diversey, Inc	Wipe	/
protex™ ultra disinfectant wipes	Parker Laboratories, Inc.	Wipe	/
SANI-CLOTH® BLEACH GERMICIDAL DISPOSABLE WIPE	Professional Disposables International Inc	Wipe	/
Sani-Cloth® Plus	Professional Disposables International Inc	Wipe	/
Schulke Mikrozid® Sensitive Wipes	SchÜlke & Mayr GmbH	Wipe	/
Sodium hypochlorite	/	Solution	Concentration 0.5%
SONO™ ULTRASOUND WIPES	Advanced Ultrasound Solutions Inc.	Wipe	/
Super Sani-Cloth®	Professional Disposables International Inc	Wipe	/

ViewMate™ Multi ultrasound system

The control panel and the area above it can be disinfected, including the front cover of the probe board. Do not disinfect the hooks on the control panel, the supporting arm and the display screen of the monitor, and connectors or sockets of all parts. For details, see Figure 7-6.

Figure 7-6 Areas that can be disinfected of ViewMate™ Multi (highlighted in gray color)

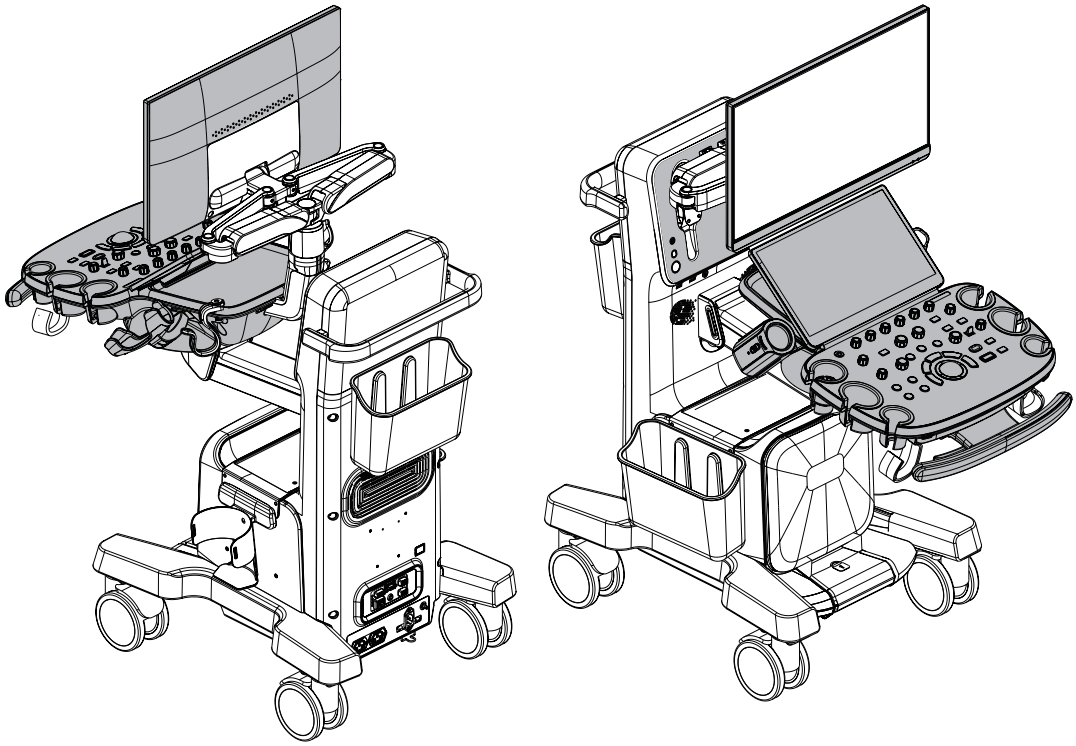


Table 7-7 Compatible Disinfectants for ViewMate™ Multi ultrasound system

Trade name	Manufacturer	Type	Remarks
CaviCide	Metrex Research	Spray	/
Clinell Universal Wipes/Clinell® Surface Wipes	GAMA Healthcare Ltd.	Wipe	/
CAVIWIPES	Metrex Research	Wipe	/
Cidex® OPA	Cilag GmbH International	Solution	/
Clorox Germcida (bleach)	Clorox Professional Products Company	Wipe	/
CLOROX HEALTHCARE FUZION CLEANER DISINFECTANT	Clorox Professional Products Company	Solution	/
Clorox Healthcare hydrogen peroxide wipes	Clorox Professional Products Company	Wipe	/
Hydrogen peroxide	/	Solution	Concentration 3%
Isopropyl alcohol	/	Solution	Concentration 70%
matrix wipe	Whiteley Corporation Pty Ltd	Wipe	/
Medical alcohol	/	Solution	Concentration 75%
Metricide OPA Plus	METREX	Solution	/
Mikrobac Tissues	Bode Chemie Gmbh	Wipe	/
mikrozid® sensitive wipes Jumbo	Schülke&Mayr Gmbh	Wipe	/

Trade name	Manufacturer	Type	Remarks
mikrozid® sensitive wipes premium	Schülke&Mayr Gmbh	Wipe	/
Milton	Milton	Solution	/
Oxivir® Tb Wipes	Diversey, Inc	Wipe	/
Protex Disinfectant Spray	Parker Laboratories, Inc.	Spray	/
Sani-Cloth® Prime GERMICIDAL DISPOSABLE WIPE	Professional Disposables International Inc	Wipe	/
Sani-Cloth® Plus	Professional Disposables International Inc	Wipe	/
Sodium hypochlorite	/	Solution	Concentration 0.5%
SONO™ ULTRASOUND WIPES	Advanced Ultrasound Solutions Inc.	Wipe	/
Transeptic Spray	Parker laboratories Inc	Spray	/
Tristel ULT	TRISTEL PLC	Solution	/
Virex II 256	Diversey,Inc.	Solution	/
VIREX TB	Diversey, Inc	Solution	/
wip anios excel	Anios Laboratoires	Wipe	/

Resona A10/A20 series ultrasound system

The control panel and above parts, including the control panel handle, trackball, small keyboard, cable hook, intracavity probe holder, gel heater, probe holder, main screen border, and main screen back cover, can be disinfected. For details, see Figure 7-7.

Disinfect the trackball after removing it from the control panel. After disinfecting the trackball, clean it with clean water to remove the residue disinfectants.

Areas that cannot be disinfected:

- Visible interfaces or sockets (for example, USB ports).
- Main screen, touch screen.
- Trackball placing area of the control panel (the hole after removing the trackball).

Figure 7-7 Areas that can be disinfected of Resona A10/A20 series (highlighted in gray color)

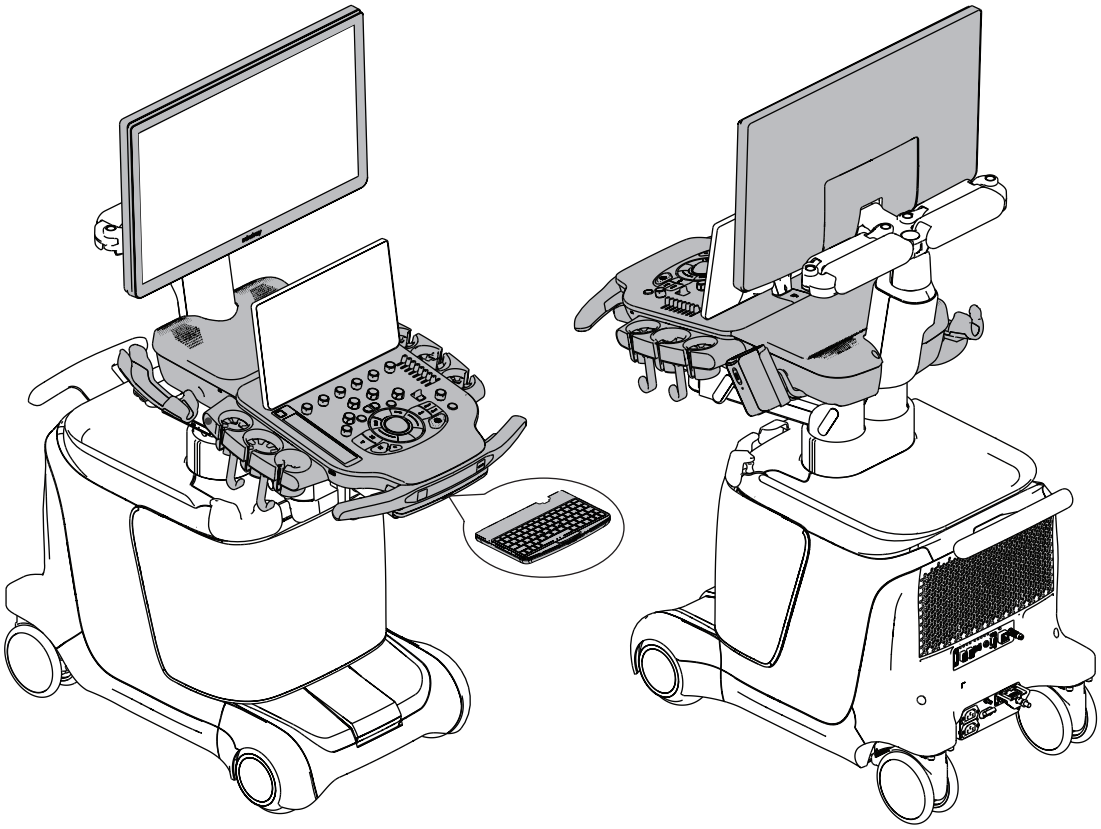


Table 7-8 Compatible Disinfectants for Resona A10/A20 series

Trade name	Manufacturer	Type	Remarks
Sodium hypochlorite	/	Solution	Concentration 0.5%
Hydrogen peroxide	/	Solution	Concentration 3%
Isopropyl alcohol	/	Solution	Concentration 70%
Medical alcohol	/	Solution	Concentration 75%
Caviwipes and Cavicide	Metrex	Wipe	/
Clinell Universal Wipes/Clinell® Surface Wipes	GAMA Healthcare Ltd.	Wipe	/
Oxivir® Tb Wipes	Diversey, Inc	Wipe	/
protex™ ultra disinfectant wipes	Parker Laboratories, Inc.	Wipe	/
SANI-CLOTH® BLEACH GERMICIDAL DISPOSABLE WIPE	Professional Disposables International Inc	Wipe	/
Sani-Cloth® Prime GERMICIDAL DISPOSABLE WIPE	Professional Disposables International Inc	Wipe	/
Sani-Cloth® Plus	Professional Disposables International Inc	Wipe	/
SONO™ ULTRASOUND WIPES	Advanced Ultrasound Solutions Inc.	Wipe	/

Trade name	Manufacturer	Type	Remarks
Super Sani-Cloth®	Professional Disposables International Inc	Wipe	/
Virex II 256	Diversey, Inc	Solution	/

Nuewa A10/A20 series ultrasound system

The control panel and above parts, including the control panel handle, trackball, small keyboard or X-Pad (subject to product configuration), cable hook, intracavity probe holder, gel heater, probe holder, main screen border, and main screen back cover, can be disinfected. For details, see Figure 7-8 or Figure 7-9.

Disinfect the trackball after removing it from the control panel. After disinfecting the trackball, clean it with clean water to remove the residue disinfectants.

Areas that cannot be disinfected:

- Visible interfaces or sockets (for example, USB ports).
- Main screen, supporting arm of the main screen, touch screen.
- Trackball placing area of the control panel (the hole after removing the trackball).

Figure 7-8 Areas that can be disinfected of Nuewa A10/A20 (without electrically assisted moving function) series (highlighted in gray color)

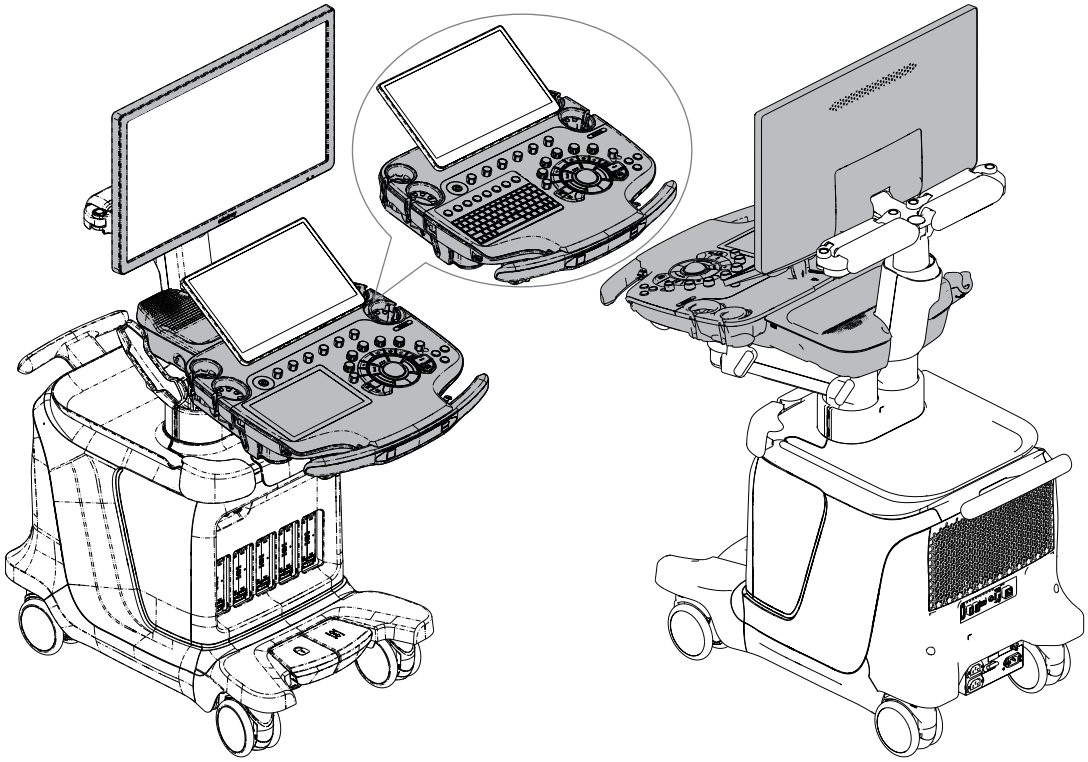


Figure 7-9 Areas that can be disinfected of Nuewa A10/A20 (with electrically assisted moving function) series (highlighted in gray color)

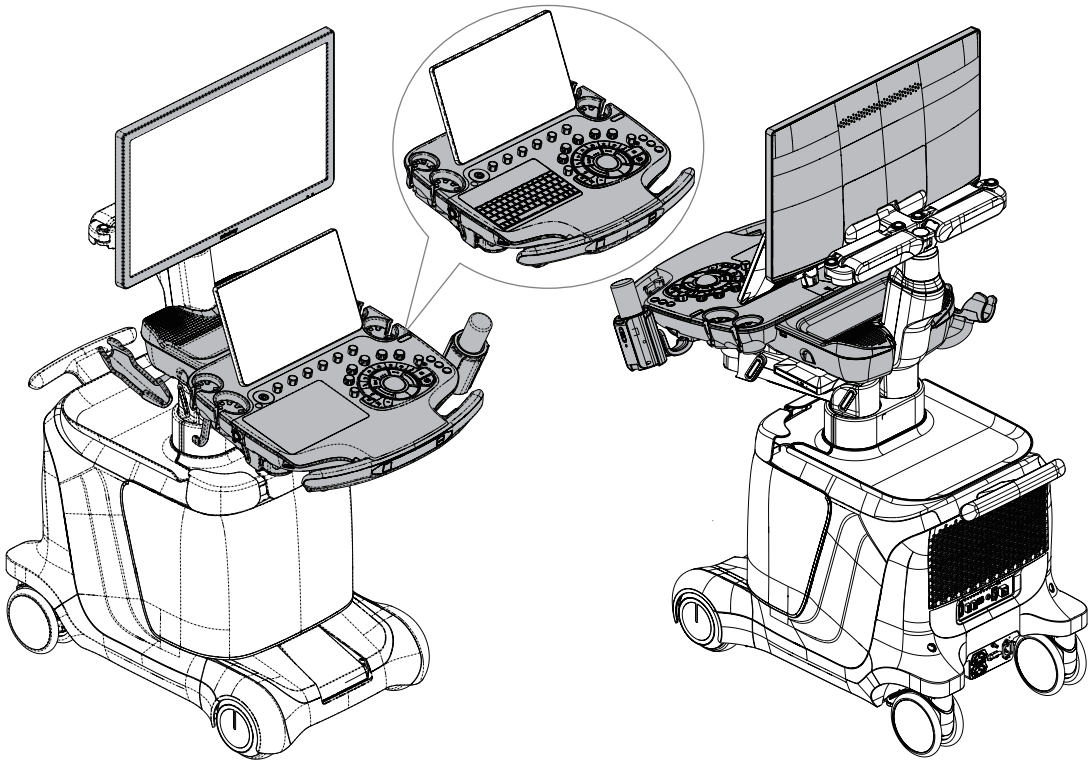


Table 7-9 Compatible Disinfectants for Nuewa A10/A20 series

Trade name	Manufacturer	Type	Remarks
Sodium hypochlorite	/	Solution	Concentration 0.5%
Hydrogen peroxide	/	Solution	Concentration 3%
Isopropyl alcohol	/	Solution	Concentration 70%
Medical alcohol	/	Solution	Concentration 75%
Caviwipes and Cavicide	Metrex	Wipe	/
Clinell Universal Wipes/Clinell® Surface Wipes	GAMA Healthcare Ltd.	Wipe	/
Oxivir® Tb Wipes	Diversey, Inc	Wipe	/
protex™ ultra disinfectant wipes	Parker Laboratories, Inc.	Wipe	/
SANI-CLOTH® BLEACH GERMICIDAL DISPOSABLE WIPE	Professional Disposables International Inc	Wipe	/
Sani-Cloth® Prime GERMICIDAL DISPOSABLE WIPE	Professional Disposables International Inc	Wipe	/
Sani-Cloth® Plus	Professional Disposables International Inc	Wipe	/
SONO™ ULTRASOUND WIPES	Advanced Ultrasound Solutions Inc.	Wipe	/
Super Sani-Cloth®	Professional Disposables International Inc	Wipe	/

Trade name	Manufacturer	Type	Remarks
Virex II 256	Diversey, Inc	Solution	/

Recho series ultrasound system

The control panel and above parts, including the control panel handle, trackball, small keyboard, cable hook, intracavity probe holder, gel heater, probe holder, minor panel storage box, main screen border, and main screen back cover, can be disinfected. For details, see Figure 7-10.

Disinfect the trackball after removing it from the control panel. After disinfecting the trackball, clean it with clean water to remove the residue disinfectants.

Areas that cannot be disinfected:

- Visible interfaces or sockets (for example, USB ports).
- Main screen, touch screen.
- Trackball placing area of the control panel (the hole after removing the trackball).
- Monitor supporting arm and minor panel upper cover.

Figure 7-10 Areas that can be disinfected of Recho series (highlighted in gray color)

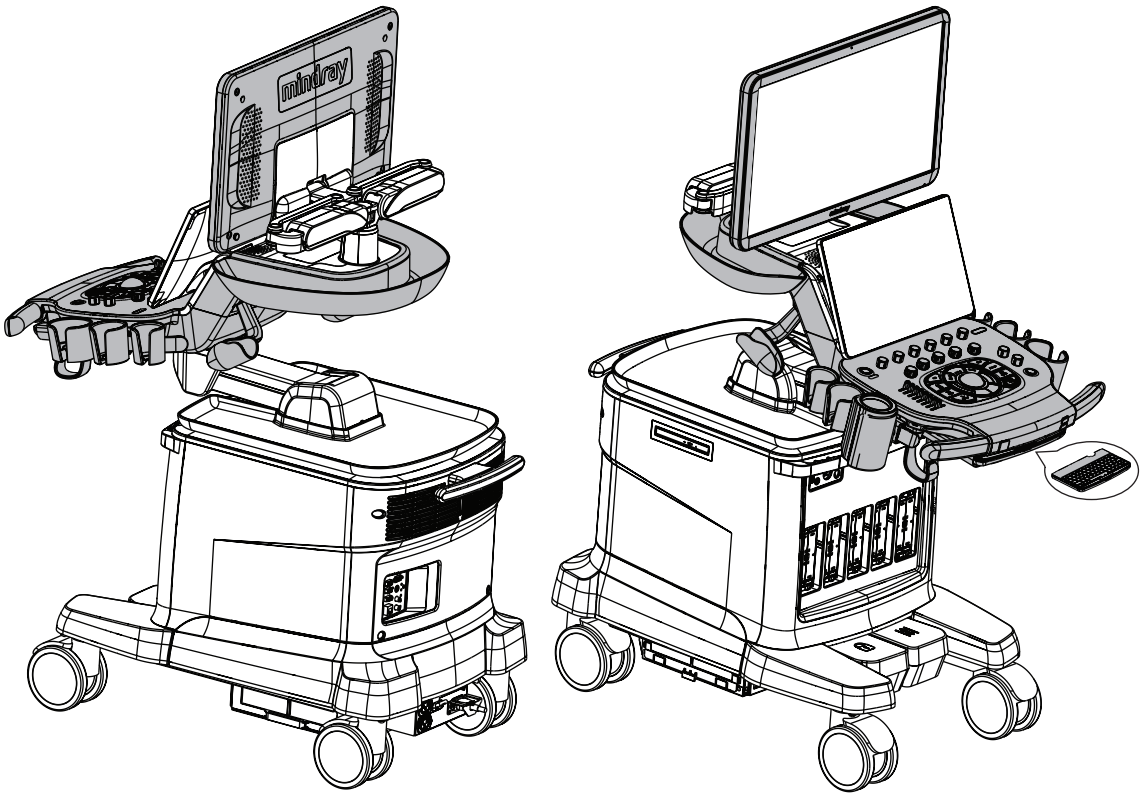


Table 7-10 Compatible Disinfectants for Recho series

Trade name	Manufacturer	Type	Remarks
Caviwipes and Cavicide	Metrex	Wipe	/
Clinell Universal Wipes/Clinell® Surface Wipes	GAMA Healthcare Ltd.	Wipe	/
Hydrogen peroxide	/	Solution	Concentration 3%
Isopropyl alcohol	/	Solution	Concentration 70%

Trade name	Manufacturer	Type	Remarks
Medical alcohol	/	Solution	Concentration 75%
Oxivir® Tb Wipes	Diversey, Inc	Wipe	/
protex™ ultra disinfectant wipes	Parker Laboratories, Inc.	Wipe	/
SANI-CLOTH® BLEACH GERMICIDAL DISPOSABLE WIPE	Professional Disposables International Inc	Wipe	/
Sani-Cloth® Plus	Professional Disposables International Inc	Wipe	/
Sani-Cloth® Prime GERMICIDAL DISPOSABLE WIPE	Professional Disposables International Inc	Wipe	/
Sodium hypochlorite	/	Solution	Concentration 0.5%
SONO™ ULTRASOUND WIPES	Advanced Ultrasound Solutions Inc.	Wipe	/
Super Sani-Cloth®	Professional Disposables International Inc	Wipe	/
Virex II 256	Diversey, Inc	Solution	/

Resona I9/Hepatus 9 series ultrasound system (Method 1)

The control panel and above parts, including the main screen back cover, main screen border, touch screen, the tray below the touch screen, control panel, control panel base, control panel handle, trackball, probe holder, small keyboard, intracavity probe holder, gel heater holder, and gel heater, can be disinfected. The main unit, including the main unit housing, rear handle, storage basket, and storage basket bracket, can be disinfected. For details, see Figure 7-11.

Disinfect the trackball after removing it from the control panel. After disinfecting the trackball, clean it with clean water to remove the residue disinfectants.

Areas that cannot be disinfected:

- Visible interfaces or sockets (for example, USB ports).
- Cooling vent and speaker.
- Main screen.
- Trackball placing area of the control panel (the hole after removing the trackball).
- Monitor supporting arm and control panel supporting arm.
- Cable hooks.
- System base and casters.

Figure 7-11 Areas that can be disinfected of Resona I9/Hepatus 9 series (highlighted in gray color)

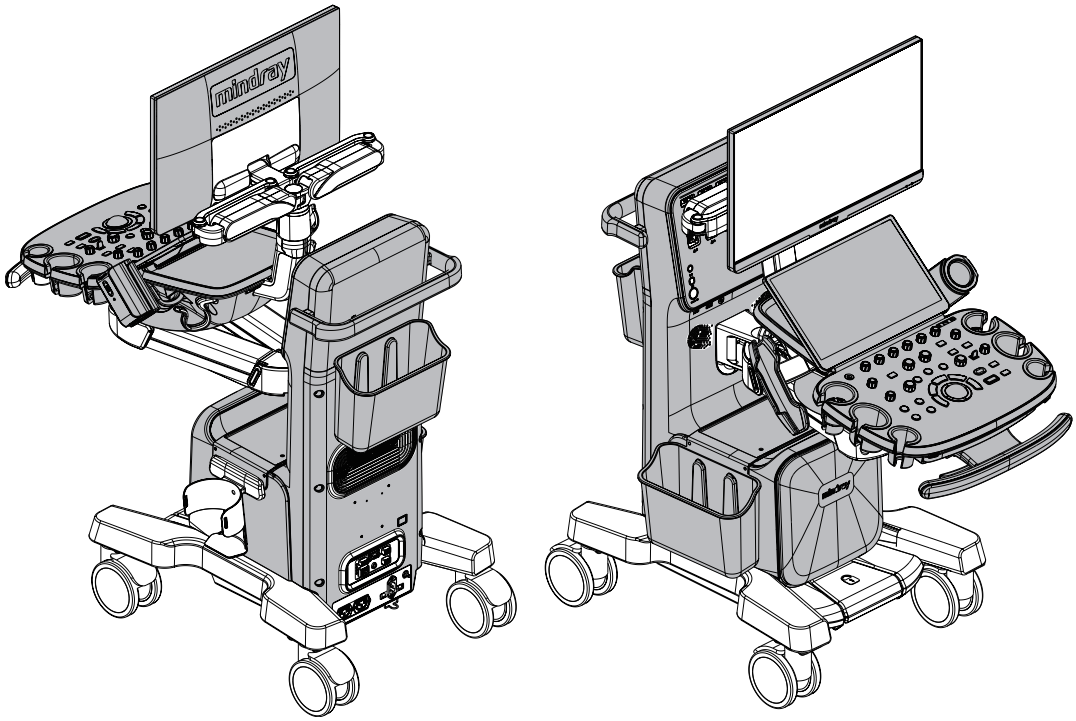


Table 7-11 Compatible Disinfectants for Resona I9/Hepatus 9 series

Trade name	Manufacturer	Type	Remarks
CAVIWIPES	Metrex Research	Wipe	/
Clorox Healthcare hydrogen peroxide wipes	Clorox Professional Products Company	Wipe	/
Hydrogen peroxide	/	Solution	Concentration 3%
VIREX TB	Diversey, Inc	Solution	/

Resona I9/Hepatus 9 series ultrasound system (Method 2)

The control panel and the area above it can be disinfected, including the front cover of the probe board. Do not disinfect the hooks on the control panel, the supporting arm and the display screen of the monitor, and connectors or sockets of all parts. For details, see Figure 7-12.

Figure 7-12 Areas that can be disinfected of Resona I9/Hepatus 9 series (highlighted in gray color)

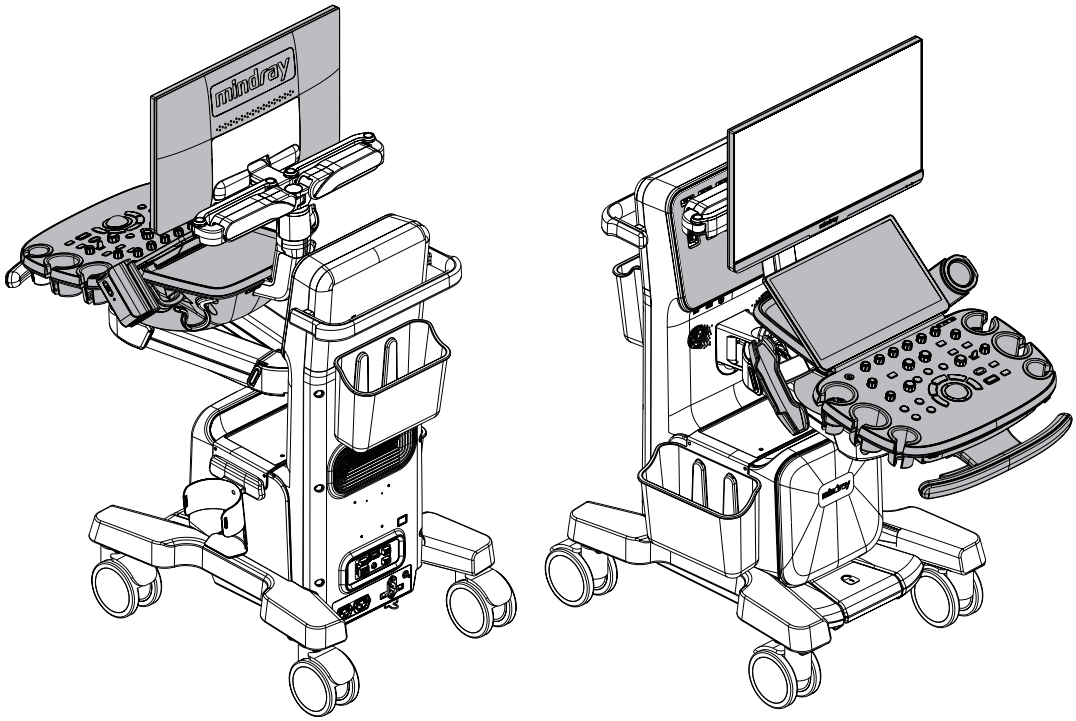


Table 7-12 Compatible Disinfectants for Resona I9/Hepatus 9 series

Trade name	Manufacturer	Type	Remarks
CaviCide	Metrex Research	Spray	/
Clinell Universal Wipes/Clinell® Surface Wipes	GAMA Healthcare Ltd.	Wipe	/
CAVIWIPES	Metrex Research	Wipe	/
Cidex® OPA	Cilag GmbH International	Solution	/
Clorox Germcida (bleach)	Clorox Professional Products Company	Wipe	/
CLOROX HEALTHCARE FUZION CLEANER DISINFECTANT	Clorox Professional Products Company	Solution	/
Clorox Healthcare hydrogen peroxide wipes	Clorox Professional Products Company	Wipe	/
Hydrogen peroxide	/	Solution	Concentration 3%
Isopropyl alcohol	/	Solution	Concentration 70%
matrix wipe	Whiteley Corporation Pty Ltd	Wipe	/
Medical alcohol	/	Solution	Concentration 75%
Metricide OPA Plus	METREX	Solution	/
Mikrobac Tissues	Bode Chemie Gmbh	Wipe	/
mikrozid® sensitive wipes Jumbo	Schülke&Mayr Gmbh	Wipe	/

Trade name	Manufacturer	Type	Remarks
mikrozid® sensitive wipes premium	Schülke&Mayr Gmbh	Wipe	/
Milton	Milton	Solution	/
Oxivir® Tb Wipes	Diversey, Inc	Wipe	/
Protex Disinfectant Spray	Parker Laboratories, Inc.	Spray	/
Sani-Cloth® Prime GERMICIDAL DISPOSABLE WIPE	Professional Disposables International Inc	Wipe	/
Sani-Cloth® Plus	Professional Disposables International Inc	Wipe	/
Sodium hypochlorite	/	Solution	Concentration 0.5%
SONO™ ULTRASOUND WIPES	Advanced Ultrasound Solutions Inc.	Wipe	/
Transeptic Spray	Parker laboratories Inc	Spray	/
Tristel ULT	TRISTEL PLC	Solution	/
Virex II 256	Diversey,Inc.	Solution	/
VIREX TB	Diversey, Inc	Solution	/
wip anios excel	Anios Laboratoires	Wipe	/

Resona I8 series ultrasound system (Method 1)

The control panel and above parts, including the main screen back cover, main screen border, touch screen, the tray below the touch screen, control panel, control panel base, control panel handle, trackball, probe holder, small keyboard, intracavity probe holder, gel heater holder, and gel heater, can be disinfected. The main unit, including the main unit housing, rear handle, storage basket, and storage basket bracket, can be disinfected. For details, see Figure 7-13.

Disinfect the trackball after removing it from the control panel. After disinfecting the trackball, clean it with clean water to remove the residue disinfectants.

Areas that cannot be disinfected:

- Visible interfaces or sockets (for example, USB ports).
- Cooling vent and speaker.
- Main screen.
- Trackball placing area of the control panel (the hole after removing the trackball).
- Monitor supporting arm and control panel supporting arm.
- Cable hooks.
- System base and casters.

Figure 7-13 Areas that can be disinfected of Resona I8 series (highlighted in gray color)

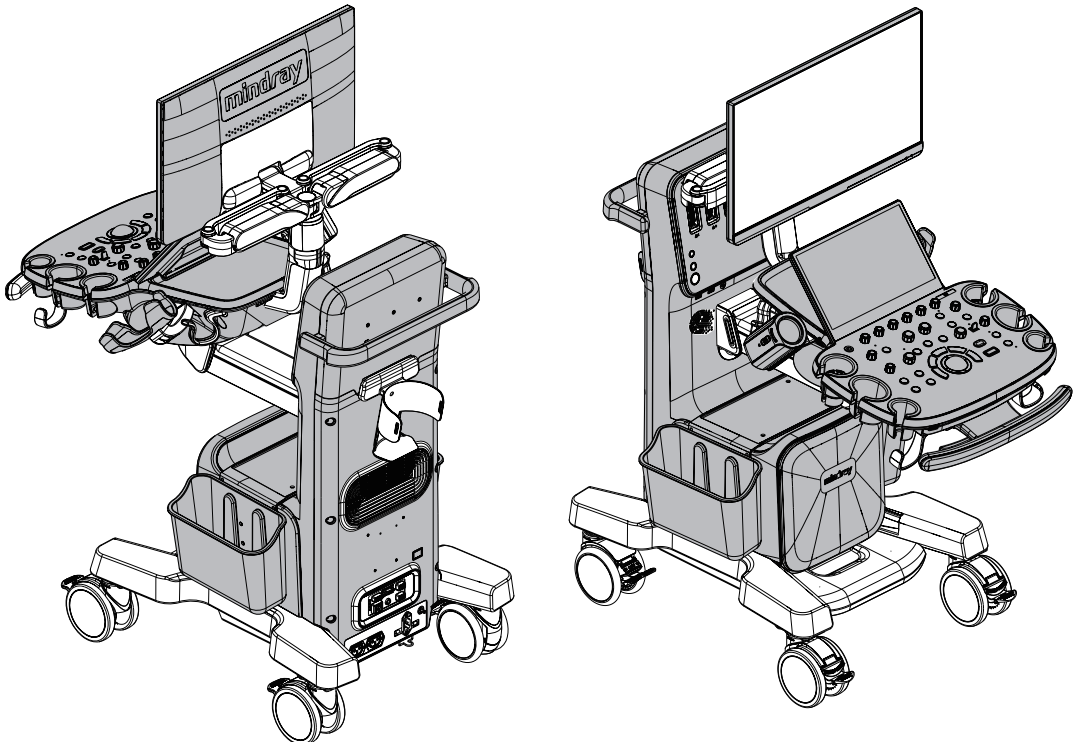


Table 7-13 Compatible Disinfectants for Resona I8 series

Trade name	Manufacturer	Type	Remarks
CAVIWIPES	Metrex Research	Wipe	/
Clorox Healthcare hydrogen peroxide wipes	Clorox Professional Products Company	Wipe	/
Hydrogen peroxide	/	Solution	Concentration 3%
VIREX TB	Diversey, Inc	Solution	/

Resona I8 series ultrasound system (Method 2)

The control panel and the area above it can be disinfected, including the front cover of the probe board. Do not disinfect the hooks on the control panel, the supporting arm and the display screen of the monitor, the touch screen, and connectors or sockets of all parts. For details, see Figure 7-14.

Figure 7-14 Areas that can be disinfected of Resona I8 series (highlighted in gray color)

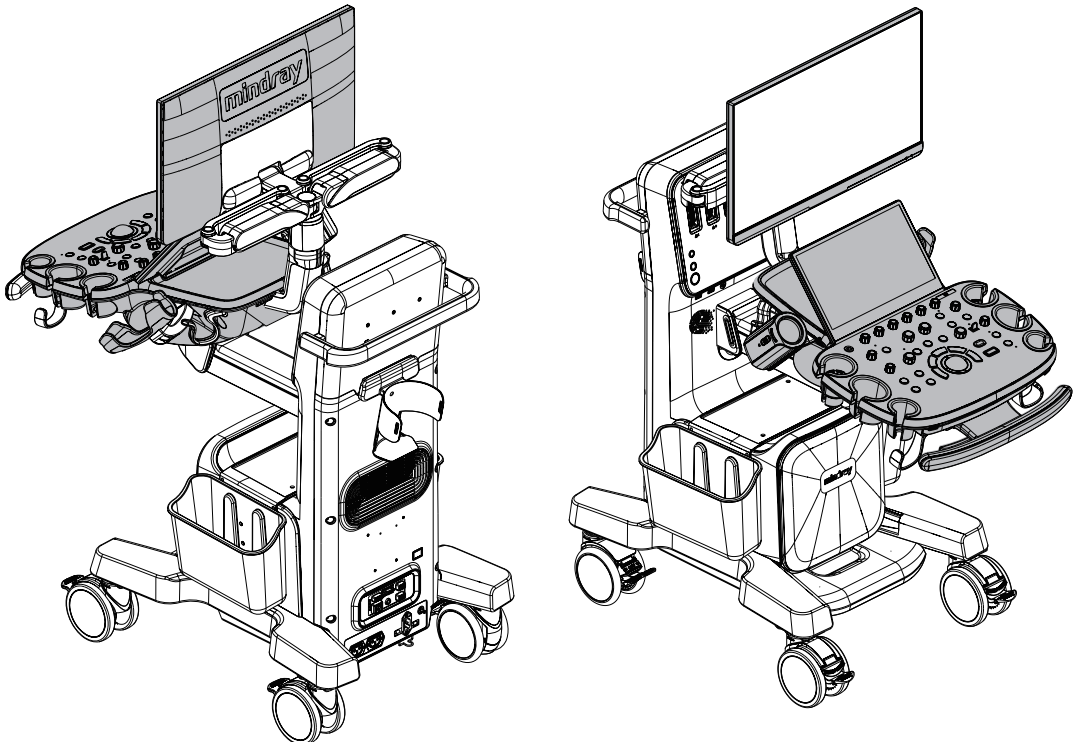


Table 7-14 Compatible Disinfectants for Resona I8 series

Trade name	Manufacturer	Type	Remarks
CaviCide	Metrex Research	Spray	/
Clinell Universal Wipes/Clinell® Surface Wipes	GAMA Healthcare Ltd.	Wipe	/
CAVIWIPES	Metrex Research	Wipe	/
Clorox Germcida (bleach)	Clorox Professional Products Company	Wipe	/
CLOROX HEALTHCARE FUZION CLEANER DISINFECTANT	Clorox Professional Products Company	Solution	/
Clorox Healthcare hydrogen peroxide wipes	Clorox Professional Products Company	Wipe	/
Hydrogen peroxide	/	Solution	Concentration 3%
Isopropyl alcohol	/	Solution	Concentration 70%
matrix wipe	Whiteley Corporation Pty Ltd	Wipe	/
Medical alcohol	/	Solution	Concentration 75%
Metricide OPA Plus	METREX	Solution	/
Mikrobac Tissues	Bode Chemie Gmbh	Wipe	/
mikrozid® sensitive wipes Jumbo	Schülke&Mayr Gmbh	Wipe	/

Trade name	Manufacturer	Type	Remarks
mikrozid® sensitive wipes premium	Schülke&Mayr Gmbh	Wipe	/
Milton	Milton	Solution	/
Oxivir® Tb Wipes	Diversey, Inc	Wipe	/
Protex Disinfectant Spray	Parker Laboratories, Inc.	Spray	/
Sodium hypochlorite	/	Solution	Concentration 0.5%
SONO™ ULTRASOUND WIPES	Advanced Ultrasound Solutions Inc.	Wipe	/
Transeptic Spray	Parker laboratories Inc	Spray	/
Tristel ULT	TRISTEL PLC	Solution	/
Virex II 256	Diversey,Inc.	Solution	/
VIREX TB	Diversey, Inc	Solution	/
wip anios excel	Anios Laboratoires	Wipe	/

AirSight (used for running TE Air)

The monitor, border and cover, except for loudspeaker and USB Type-C port, can be disinfected. For details, see Figure 7-15.

Figure 7-15 Areas that can be disinfected of AirSight (highlighted in gray color)

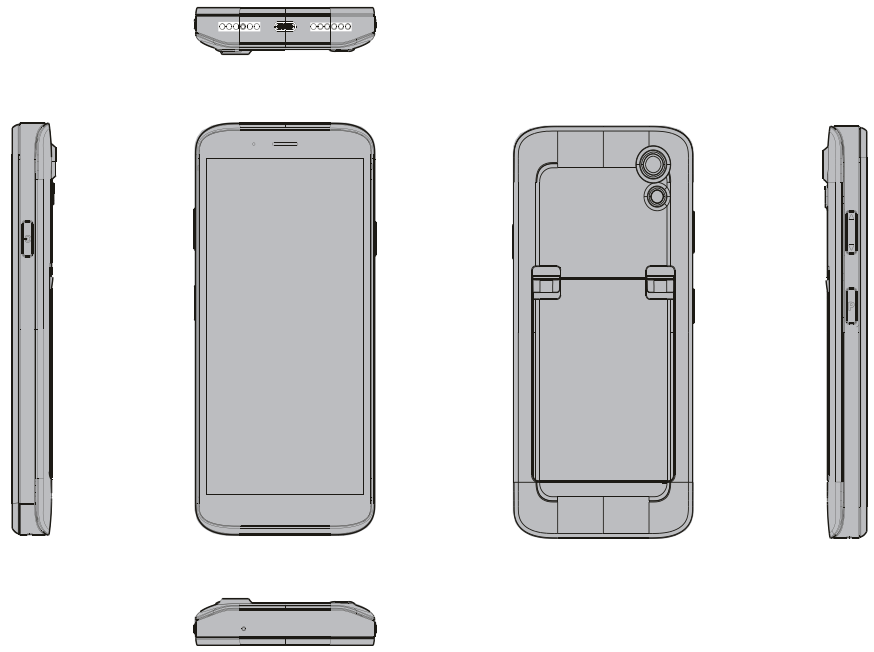


Table 7-15 Compatible Disinfectants for AirSight

Trade name	Manufacturer	Type	Remarks
Isopropyl alcohol	/	Solution	Concentration 70%
Medical alcohol	/	Solution	Concentration 75%
Hydrogen peroxide	/	Solution	Concentration 3%

Trade name	Manufacturer	Type	Remarks
Sodium hypochlorite	/	Solution	Concentration 0.5%
SONO™ ULTRASOUND WIPES	Advanced Ultrasound Solutions Inc.	Wipe	/
Schulke mikrozid® Sensitive Wipes	Schülke	Wipe	/
Mikrobac Tissues	Bode Chemie Gmbh	Wipe	/
Protex Disinfectant Spray	Parker Laboratories, Inc.	Spray	/
WIP ANIOS Premium	Anios Laboratoires	Wipe	/
VIREX TB	Diversey, Inc	Solution	/
Virex II 256	Diversey, Inc	Solution	/
Oxivir® Tb Wipes	Diversey, Inc	Wipe	/
Sani-Cloth® Prime GERMICIDAL DISPOSABLE WIPE	Professional Disposables International Inc	Wipe	/
Sani-Cloth® Plus	Professional Disposables International Inc	Wipe	/
Sani-Cloth® AF3	Professional Disposables International Inc	Wipe	/
Super Sani-Cloth®	Professional Disposables International Inc	Wipe	/
CAVIWIPES	Metrex Research	Wipe	/
Cleanisept Wipes	Dr.Schumacher GmbH	Wipe	/
Clinell universal wipes	GAMA Healthcare Ltd.	Wipe	/
Tristel DUO/Tristel DUO ULT/ Tristel DUO NCU	Tristel Medical Equipment Ltd.	Spray	/
Clorox Germcida (bleach)	Clorox Professional Products Company	Wipe	/
Whiteley Matrix wipe	Whiteley	Wipe	/
Clorox Healthcare hydrogen peroxide wipes	Clorox Professional Products Company	Wipe	/

MX6/MX5/MX3 series ultrasound system with touchpad

The control panel, handle, monitor, and the back cover of the monitor can be disinfected. For details, see Figure 7-16.

Do not disinfect the bottom cover, side panels around the main unit, any visible sockets or interfaces (such as probe socket, ventilation holes, dust-proof cover, loudspeaker, sockets or interfaces in the I/O panel and power supply panel).

Figure 7-16 Areas that can be disinfected of MX6/MX5/MX3 series with touchpad (highlighted in gray color)

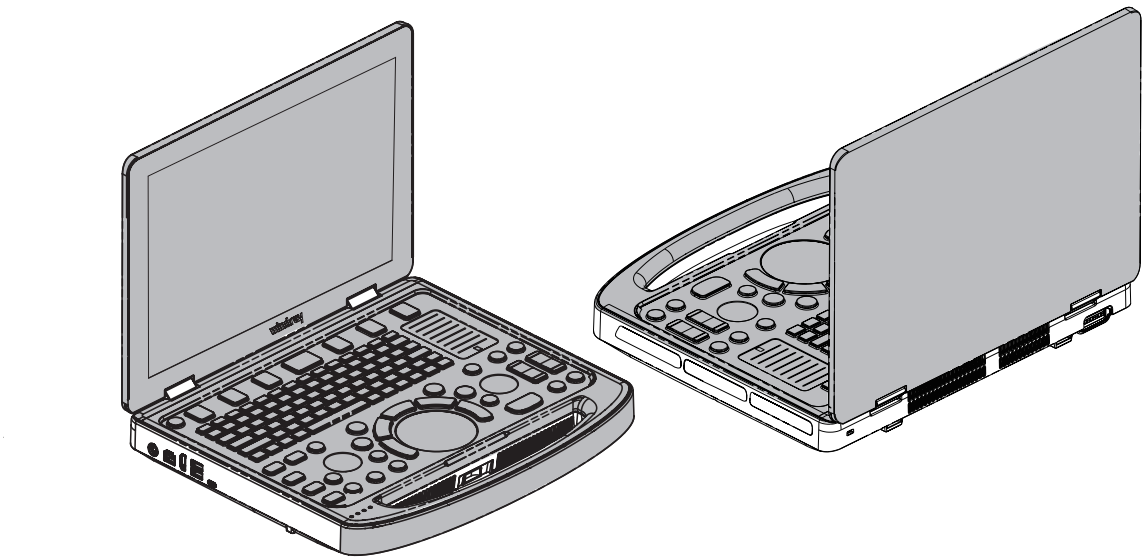


Table 7-16 Compatible Disinfectants for MX6/MX5/MX3 series with touchpad

Trade name	Manufacturer	Type	Remarks
Isopropyl alcohol	/	Solution	Concentration 70%
Medical alcohol	/	Solution	Concentration 75%
Hydrogen peroxide	/	Solution	Concentration 3%
Sodium hypochlorite	/	Solution	Concentration 0.5%
SONO™ ULTRASOUND WIPES	Advanced Ultrasound Solutions Inc.	Wipe	/
Virex II 256	Diversey, Inc	Solution	/
protex™ ultra disinfectant wipes	Parker Laboratories, Inc.	Wipe	/
SANI-CLOTH® BLEACH GERMICIDAL DISPOSABLE WIPE	Professional Disposables International Inc	Wipe	/
Super Sani-Cloth®	Professional Disposables International Inc	Wipe	/
Sani-Cloth® Plus	Professional Disposables International Inc	Wipe	/

NOTE

The ultrasound system diagrams in this manual may vary due to different versions and configurations. The actual ultrasound system that you purchase shall prevail.

7.2.2 Disinfection Procedure

NOTE

Clean the main unit thoroughly in accordance with the cleaning procedure before disinfection.

Perform the following procedure:

1. Wear medical gloves to prevent infection.
2. Follow the disinfectant manufacturer's recommended contact time and method to disinfect the areas that can be disinfected with the compatible disinfectant.
3. Remove any residue with a water-moistened soft cloth on the main unit.
4. Wipe off water on the main unit using disposable lint-free soft cloth or tissue.

   Do not dry the main unit by heating.

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8 Cleaning Other Accessories

8.1 Cleaning the Holders

Perform the following steps to clean probe holders and coupling gel holders.

1. Use dry soft cloth to wipe off the dust attached to inside, outside or gap of probe holder or gel holder. As to small intra-cavity probe holder or its gap, use the soft brush to brush the dust or stain.
2. Remained stain attached to inside, outside of holder should be washed out by cloth with a little soapy water and then allow it to air dry after take it out.
3. Gel warmer: Take the gel warmer out after pull out the power supply cable, use dry soft cloth to wipe off the dust attached to inside and outside, then brush the dust in the gel warmer or brush the stain with a little soap water and allow it to air dry at last.

8.2 Cleaning the ECG Cables

See the accompanying ECG manual for details.

8.3 Cleaning the Peripherals

Do the cleaning maintenance according to your actual peripheral configuration; items which are not configured can be skipped.

Color and B/W video printer

First wipe off dust or stain attached to the cover of printer with soft dry cloth, then clean the inside of printer. Be sure to do the cleaning maintenance according to the operation manual if necessary.

Graph/text printer

First wipe off dust or stain attached to the cover of printer with soft dry cloth, then clean the inside of printer. Be sure to do the cleaning maintenance according to the operation manual if necessary.

Footswitch

Use soft dry cloth with a little mild soap water to wipe off the dust or stain attached to the pedals or cable of foot switch.

Barcode reader

First use soft dry cloth to wipe off dust attached to glass panel of the reader, then the dust or strain attached to cable and bracket. Refer to barcode reader operator’s manual for details.

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Appendix A Compatible Probe Cleaners and Disinfectants

NOTE:

The content in the list is written based on ultrasound systems manufactured by Mindray. The versions of the ultrasound systems will be updated, and the list may be not updated in time. Therefore, if the desired information cannot be found in this list, contact Mindray customer service department or sales representative.

A.1 Cleaners

a1: MetriZyme
a2: Tristel Pre-Clean Wipes
a3: Liquinox
a4: Revital-OX Enzymatic Detergent
a5: MetriSponge
a6: Prolystica 2X Concentrate Enzymatic Cleaner
a7: Endozime and Endozime Sponge
a8: klenzyme
a9: ANIOSYME 5
a10: DDN9

Probe		Cleaners
Convex	C5-1s/C5-1E/C5-1U/C5-1/C5-2/C5-2s/C5-2E/C6-2E/C6-2/C6-2s/C6-2P/C11-3E/C11-3s/C11-3U/C11-3/C5-1m/mC5-2m/mC11-3m	a1, a2, a3, a4, a5, a6, a7, a9, a10
	C6-2Gs/C6-2GE/C6-2GU/SC7-1U/SC7-1s/SC9-2U/SC9-2s/SL10-3U/SL10-3s/SCM7-1U/SLM10-3U/SC6-1GU/C6-1/SC6-1MU/C6-1m/C5-2m/C5-2m-e/SCM4-1U	a1, a2, a3, a4, a5, a6, a7, a9, a10
	C7-3E/C7-3/3C1/3C1s/3C1P/6C2/6C2P/6C2s/35C20EA/35C50EA/35C50EB/35C50P/65C15EAV/65C15EA	a1, a2, a3, a4, a5, a6, a7, a9, a10
	3C5/3C5s/3C5A/3C5P	a1, a2, a3, a4, a5, a6, a7, a9, a10
	SC5-1U/SC5-1E	a1, a2, a3, a4, a5, a6, a7
	SC6-1U/SC6-1E/SC6-1s/SC5-1NE/SC5-1Ns/SC5-1N	a1, a2, a3, a4, a5, a6, a7, a9, a10
	SC8-2U/SC8-2E/SC8-2s	a1, a8
	65EC10EA/65EC10EB/65EC10EC	a1, a2, a3, a4, a5, a6, a7, a9
	65EC10ED	a1, a2, a3, a4, a5, a6, a7, a9, a10
	C4-1/C4-1U/C4-1s	a1, a3, a4, a5, a6, a7
	C9-3Ts	a1, a3, a4, a5, a6, a7
	SC10-2RCs	a9

a1: MetriZyme
a2: Tristel Pre-Clean Wipes
a3: Liquinox
a4: Revital-OX Enzymatic Detergent
a5: MetriSponge
a6: Prolystica 2X Concentrate Enzymatic Cleaner
a7: Endozime and Endozime Sponge
a8: klenzyme
a9: ANIOSYME 5
a10: DDN9

Probe		Cleaners
Linear	L7-3/L7-3s/L7-3E/7L4/7L4s/7L4A/7L4P/7L4B/7L4Bs/ 7L4BP/7L5/7L5P/7L5s/7L6/7L6s/75L38EA/ 75L38EB/75L53EA/75L60EA/75L38P/10L4/10L4s	a1, a2, a3, a4, a5, a6, a7, a9, a10
	65EL60EA/6LE7/6LE7s/6LE7P/6 LE5V/6LE5Vs/6LE5VP/ 7LT4/7LT4s/7LT4P/7LT4E/50L60EAV/65L50HAV/ 75L50EAV/75LT38EA	a1, a2, a3, a4, a5, a6, a7, a9
	7LT4s (only applicable for the connector with black cover)	a1, a2, a3, a4, a5, a6, a7, a9
	L9-3/L9-3U/L9-3E/L9-3s/L12-3/L12-3E/L13-3s/L13-3/L12-4/ L12-4s/L14-6N/L14-6Ns/L14-6NP/L14-6NE/L14-6WE/ L14-6Ws/L14-6WU/L13-3m/L18-6m/L9-3m	a1, a2, a3, a4, a5, a6, a7, a9, a10
	L10-3E/L10-3s	a1
	L11-3U/L11-3VNs/L13-3N/L13-3Ns/L14-3s/L14-3W/L14-3WU/L14-3Ws/L14-3WE/L14-3m	a1, a2, a3, a4, a5, a6, a7, a9, a10
	L11-4/L11-4s/L14-6/L14-6s/L14-6P/10L24EA	a1, a2, a3, a4, a5, a6, a7, a9, a10
	L16-4HE/L16-4Hs/L16-4HU	a8
	L16-4Hs (only applicable for the connector with black cover)	a8
	LM14-6E/LM14-6s/LM16-4U	a1, a2, a3, a4, a5, a6, a7, a9, a10
	L20-5U/L20-5s/L20-5E	a1,a3, a4, a5, a6, a7, a9, a10
	L12-3RCs/L12-3VNs/L15-3RCs	a9
	L13-3WE/L13-3WU/L13-3Ws/L15-3WE/ L15-3WU/L15-3Ws/L24-6RCs/L24-6Hs/ L18-5WU/LM18-5WU/LM24-6WU	a9, a10
	L14-5sp/HS14-5Lm	a1, a3, a4, a5, a6, a7
	L14-5WU/L14-5WE/L14-5Ws	a1, a3, a4, a5, a6, a7
	L30-8U/L33-8U/L33-8s	a8
	L12-3m/L12-3m-e/L12-3Wm	a1, a2, a3, a4, a5, a6, a7, a9, a10
Phased	P4-2/P4-2s/P4-2E/P4-2NE/P4-2Ns/ P10-4E/P10-4s/P10-4/ P10-4U/2P2/2P2s/2P2P/P4-2m/P10-4m	a1, a2, a3, a4, a5, a6, a7, a9, a10
	P7-3/P7-3s/P7-3E/P7-3U/P7-3P	a1, a8
	P12-4/P12-4s	a1
	SP5-1U/SP5-1s/SP5-1E/SP5-1	a1, a2, a3, a4, a5, a6, a7, a9, a10
	SP5-1Ns/SP5-1N/SP5-1m	a1, a2, a3, a4, a5, a6, a7, a9, a10
	LFP5-1s/LFP5-1U/LFC5-1s/LFC5-1U	a10
	P8-2s/P8-2/P8-2U/P8-2P/SP9-2U/ SPM6-1U/XP5-1U/P8-2m	a1, a2, a3, a4, a5, a6, a7, a9, a10
	i3P/i3PA/a3P-X/z3P/z3Ps/z3Pt/a3Px/e3P/e3Ps/e3Pt	a1, a2, a3, a4, a5, a6, a7, a9

a1: MetriZyme
a2: Tristel Pre-Clean Wipes
a3: Liquinox
a4: Revital-OX Enzymatic Detergent
a5: MetriSponge
a6: Prolystica 2X Concentrate Enzymatic Cleaner
a7: Endozime and Endozime Sponge
a8: klenzyme
a9: ANIOSYME 5
a10: DDN9

Probe		Cleaners
Endo-cavity	V11-3/V11-3BE/V11-3B/V11-3WE/V11-3Ws/V11-3E/ V11-3s/V11-3m/V11-3m-B	a1, a2, a3, a4, a5, a6, a7, a9, a10
	V11-3HU/V11-3HE/V11-3Hs/V11-3H/V11-3HB/ V11-3HBs/V11-3HBE/SV10-2U/SV10-2s	a1, a2, a3, a4, a5, a6, a7, a9, a10
	V11-3HBs V11-3Hs (only applicable for the connector with black cover)	a1, a2, a3, a4, a5, a6, a7, a9, a10
	V10-4/V10-4s/V10-4B/V10-4Bs/V10-4BP/ 6CV1/6CV1s/6CV1P/V10-4m/V10-4m-B	a1, a2, a3, a4, a5, a6, a7, a9, a10
Biplane	CB10-4/CB10-4P/CB10-4A/CB10-4E/CB10-4s/6LB7/6LB7s/6LB7P/6LB7E/65EB10EA	a1, a2, a3, a4, a5, a6, a7, a9
	ELC13-4U/ELC13-4s/ELC10-4	a9
4D	D7-2/D7-2E/D7-2s/SD8-1/SD8-1E/SD8-1s/SD8-1U/D6-2/D6-2P/D6-2EA/D6-2B/ D6-2A/D7-2m/D6-2m/SDM9-2U	a1, a2, a3, a4, a5, a6, a7, a9
	D6-2NE/DL14-3U	a1
	DE11-3U/DE11-3s/DE11-3E/DE11-3/DE11-3WE/ DE11-3Ws/DE11-3WU/SDE14-3LU/DE13-5WU/SDE10-2WU/SDE10-2Ws	a1, a2, a3, a4, a5, a6, a7
	DE10-3WU/DE10-3WE (only for the probe with gray strain relief)	a8
Composite probe	i5M/z5M/z5Ms/z5Mt/e5M/e5Ms/e5Mt/a5Mx	a1, a2, a3, a4, a5, a6, a7, a9

A.2 Disinfectants

A.2.1 Wipes

b1: CLEANISEPT® WIPES
b2: mikrozid® AF Wipes Jumbo
b3: PROTEX™ DISINFECTANT Wipes
b4: Sani-Cloth® Plus
b5: SONO™ ULTRASOUND WIPES
b7: Tristel Sporicidal Wipes
b8: Tristel Rinse Wipes
b9: Clinell Universal wipes/Clinell® Surface Wipes
b10: mikrozid® Sensitive Wipes
b11: Wip' Anios premium
b12: ultrasound probe cleaning wipes
b13: Sani-Cloth AF3 (gray)
b14: protex™ ultra disinfectant wipes
b15: Sani-Cloth HB
b16: CaviWipes
b17: Dispatch Towels
b18: Accel TB Wipes
b19: CaviWipes 1
b20: Tuffle 5
b21: Sani-Cloth Active
b22: Septiwipes
b23: Mikorbac Tissues
b24: Sani-Cloth Germicidal Wipes
b25: WIP'ANIOS CLEAN'UP
b26: CaviWipes XL
b27: Oxivir® Tb Wipes
b28: Oxivir 1 Wipes
b29: SANI-CLOTH® BLEACH GERMICIDAL DISPOSABLE WIPE
b30: wip anios excel
b31: Virusolve® + Pronte all'uso Wipes
b32: Super Sani-Cloth®
b33: Sani-Cloth® Prime GERMICIDAL DISPOSABLE WIPE

Probe		Wipes
Convex	C5-1s/C5-1E/C5-1U/C5-1/C5-2/C5-2s/C5-2E/C6-2E/C6-2/C6-2s/C6-2P/C11-3E/C11-3s/C11-3U/C11-3/C5-1m/mC5-2m/mC11-3m	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b32, b33
	C6-2Gs/C6-2GE/C6-2GU/SC7-1U/SC7-1s/SC9-2U/SC9-2s/SL10-3U/SL10-3s/SCM7-1U/SLM10-3U/SC6-1GU/C6-1/SC6-1MU/C6-1m/C5-2m/C5-2m-e/SCM4-1U	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31, b32, b33
	C7-3E/C7-3/3C1/3C1s/3C1P/6C2/6C2P/6C2s/35C20EA/35C50EA/35C50EB/35C50P/65C15EAV/65C15EA	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31, b32, b33
	3C5/3C5s/3C5A/3C5P	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31, b32, b33
	SC5-1U/SC5-1E	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b16, b18, b19, b24, b25, b26, b27, b28, b29
	SC6-1U/SC6-1E/SC6-1s/SC5-1NE/SC5-1Ns/SC5-1N	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31, b32, b33
	SC8-2U/SC8-2E/SC8-2s	b15, b25
	65EC10EA/65EC10EB/65EC10EC	b1, b2, b3, b4, b5, b7, b8, b10, b11, b12, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31
	65EC10ED	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31, b32, b33

b1: CLEANISEPT® WIPES
b2: mikrozid® AF Wipes Jumbo
b3: PROTEX™ DISINFECTANT Wipes
b4: Sani-Cloth® Plus
b5: SONO™ ULTRASOUND WIPES
b7: Tristel Sporicidal Wipes
b8: Tristel Rinse Wipes
b9: Clinell Universal wipes/Clinell® Surface Wipes
b10: mikrozid® Sensitive Wipes
b11: Wip' Anios premium
b12: ultrasound probe cleaning wipes
b13: Sani-Cloth AF3 (gray)
b14: protex™ ultra disinfectant wipes
b15: Sani-Cloth HB
b16: CaviWipes
b17: Dispatch Towels
b18: Accel TB Wipes
b19: CaviWipes 1
b20: Tuffle 5
b21: Sani-Cloth Active
b22: Septiwipes
b23: Mikorbac Tissues
b24: Sani-Cloth Germicidal Wipes
b25: WIP'ANIOS CLEAN'UP
b26: CaviWipes XL
b27: Oxivir® Tb Wipes
b28: Oxivir 1 Wipes
b29: SANI-CLOTH® BLEACH GERMICIDAL DISPOSABLE WIPE
b30: wip anios excel
b31: Virusolve® + Pronte all'uso Wipes
b32: Super Sani-Cloth®
b33: Sani-Cloth® Prime GERMICIDAL DISPOSABLE WIPE

Probe		Wipes
Convex	C4-1/C4-1U/C4-1s	b4, b5, b13, b14, b15, b16, b17, b18, b26, b32, b33
	C9-3Ts	b16, b26
	SC10-2RCs	b1, b4, b5, b11, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31, b32, b33
Linear	L7-3/L7-3s/L7-3E/7L4/7L4s/7L 4A/7L4P/7L4B/7L4Bs/ 7L4BP/7L5/7L5P/7L5s/7L6/7L6s/75L38EA/ 75L38EB/75L53EA/75L60EA/75L38P/10L4/10L4s	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31, b32, b33
	65EL60EA/6LE7/6LE7s/6LE7P/6LE5V/6LE5Vs/ 6LE5VP/7LT4/7LT4s/7LT4P/7LT4E/50L60EAV/ 65L50HAV/75L50EAV/75LT38EA	b1, b2, b3, b4, b5, b7, b8, b10, b11, b12, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31
	7LT4s (only applicable for the connector with black cover)	b1, b2, b3, b4, b5, b7, b8, b10, b11, b12, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31
	L9-3/L9-3U/L9-3E/L9-3s/L12-3/ L12-3E/L13-3s/L13-3/L12-4/ L12-4s/L14-6N/L14-6Ns/L14-6NP/L14-6NE/L14-6WE/ L14-6Ws/L14-6WU/L13-3m/L18-6m/L9-3m	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b32, b33
	L10-3E/L10-3s	b25
	L11-3U/L11-3VNs/L13-3N/L13-3Ns/L14-3s/L14-3W/L14-3WU/L14-3Ws/L14-3WE/L14-3m	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31, b32, b33
	L11-4/L11-4s/L14-6/L14-6s/L14-6P/10L24EA	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31, b32, b33
	LM14-6E/LM14-6s/LM16-4U	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31, b32, b33
	L20-5U/L20-5s/L20-5E	b4, b5, b13, b14, b15, b16, b17, b18, b25, b26, b31

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b12: ultrasound probe cleaning wipes
b13: Sani-Cloth AF3 (gray)
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b24: Sani-Cloth Germicidal Wipes
b25: WIP'ANIOS CLEAN'UP
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b27: Oxivir® Tb Wipes
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b29: SANI-CLOTH® BLEACH GERMICIDAL DISPOSABLE WIPE
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b32: Super Sani-Cloth®
b33: Sani-Cloth® Prime GERMICIDAL DISPOSABLE WIPE

Probe		Wipes
Linear	L12-3RCs/L12-3VNs/L15-3RCs	b1, b4, b5, b11, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31, b32, b33
	L13-3WE/L13-3WU/L13-3Ws/L15-3WE/ L15-3WU/L15-3Ws/L24-6RCs/L24-6Hs/ L18-5WU/LM18-5WU/LM24-6WU	b13, b25, b29, b30, b31, b32, b33
	L14-5sp/HS14-5Lm	b4, b5, b13, b14, b15, b16, b17, b18, b26, b32, b33
	L14-5WU/L14-5WE/L14-5Ws	b4, b5, b13, b14, b15, b16, b17, b18, b26, b32, b33
	L12-3m/L12-3m-e/L12-3Wm	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31, b32, b33
Phased	P4-2/P4-2s/P4-2E/P4-2NE/P4-2Ns/P10-4E/P10-4s/P10-4/P10-4U/2P2/2P2s/2P2P/P4-2m/P10-4m	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31, b32, b33
	P7-3/P7-3s/P7-3E/P7-3U/P7-3P	b3, b4, b15, b25, b29
	P12-4/P12-4s	b5, b25, b29
	SP5-1U/SP5-1s/SP5-1E/SP5-1	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31, b32, b33
	SP5-1Ns/SP5-1N/SP5-1m	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b32, b33
	LFP5-1s/LFP5-1U/LFC5-1s/LFC5-1U	b1, b4, b5, b11, b13, b16, b18, b19, b24, b26, b27, b28, b32, b33
	P8-2s/P8-2/P8-2U/P8-2P/SP9-2U/ SPM6-1U/XP5-1U/P8-2m	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31, b32, b33

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b8: Tristel Rinse Wipes
b9: Clinell Universal wipes/Clinell® Surface Wipes
b10: mikrozid® Sensitive Wipes
b11: Wip' Anios premium
b12: ultrasound probe cleaning wipes
b13: Sani-Cloth AF3 (gray)
b14: protex™ ultra disinfectant wipes
b15: Sani-Cloth HB
b16: CaviWipes
b17: Dispatch Towels
b18: Accel TB Wipes
b19: CaviWipes 1
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b33: Sani-Cloth® Prime GERMICIDAL DISPOSABLE WIPE

Probe		Wipes
Phased	i3P/i3PA/a3P-X/z3P/z3Ps/z3Pt/a3Px/e3P/e3Ps/e3Pt	b1, b2, b4, b5, b7, b8, b9, b10, b11, b12, b13, b14, b16, b18, b19, b24, b25, b26, b27, b29, b30, b31, b32, b33
Endo-cavity	V11-3/V11-3BE/V11-3B/V11-3WE/V11-3Ws/V11-3E/V11-3s/V11-3m/V11-3m-B	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b32, b33
	V11-3HU/V11-3HE/V11-3Hs/V11-3H/V11-3HB/V11-3HBs/V11-3HBE/SV10-2U/SV10-2s	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31, b32, b33
	V11-3HBs V11-3Hs (only applicable for the connector with black cover)	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31, b32, b33
	V10-4/V10-4s/V10-4B/V10-4Bs/V10-4BP/6CV1/6CV1s/6CV1P/V10-4m/V10-4m-B	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31, b32, b33
Biplane	CB10-4/CB10-4P/CB10-4A/CB10-4E/CB10-4s/6LB7/6LB7s/6LB7P/6LB7E/65EB10EA	b1, b2, b3, b4, b5, b7, b8, b10, b11, b12, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31
	ELC13-4U/ELC13-4s/ELC10-4	b1, b4, b5, b11, b16, b18, b19, b24, b26, b27, b28, b30, b31

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Probe		Wipes
4D	D7-2/D7-2E/D7-2s/SD8-1/SD8-1E/ SD8-1s/SD8-1U/D6-2/D6-2P/D6-2EA/ D6-2B/D6-2A/D7-2m/D6-2m/SDM9-2U	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b29, b30, b31, b32, b33
	D8-2E/D8-2U	b10, b16, b19, b20, b21
	D8-4U	b4, b10, b16, b19, b20
	DE10-3/DE10-3E/DE10-3U/DE10-3s	b10, b16, b19, b20, b21, b32, b33
	DE11-3U/DE11-3s/DE11-3E/DE11-3/DE11-3WE/ DE11-3Ws/DE11-3WU/SDE14-3LU/DE13-5WU/SDE10-2WU/SDE10-2Ws	b1, b2, b3, b4, b5, b7, b8, b9, b10, b11, b12, b13, b16, b18, b19, b24, b25, b26, b27, b28, b32, b33
	DE10-3WU/DE10-3WE(only for the probe with gray strain relief)	b1, b12, b15, b16, b20, b21, b22, b23, b24
Composite probe	i5M/z5M/z5Ms/z5Mt/e5M/e5Ms/e5Mt/a5Mx	b1, b2, b4, b5, b7, b8, b9, b10, b11, b12, b13, b14, b16, b18, b19, b24, b25, b26, b27, b29, b30, b31, b32, b33

A.2.2 Sprays

c1: Oxivir™/MC Tb
c2: PI-SPRAY II
c3: Surfa'safe
c4: TRANSEPTIC
c5: PROTEX™ DISINFECTANT SPRAY
c7: Tristel DUO/Tristel DUO ULT/ Tristel DUO NCU
c8: IODOCLEAN
c9: Protex Spray
c9: Protex Spray
c10: CaviCide
c11: T-Spray
c12: Indican Form
c13: Transeptic Spray
c14: CAVICIDE 1
c15: OXIVIR 1
c16: WIP'ANIOS SPOR'ACTIV
c17: Accel TB Liquid
c18: Sani-HyPerCide GERMICIDAL SPRAY
c19: Sani-24 GERMICIDAL SPRAY

Probe		Spray
Convex	C5-1s/C5-1E/C5-1U/C5-1/C5-2/C5-2s/C5-2E/C6-2E/ C6-2/C6-2s/C6-2P/C11-3E/C11-3s/C11-3U/C11-3/C5-1m/mC5-2m/mC11-3m	c1, c2, c3, c5, c7, c8, c14, c15, c16, c17, c18, c19
	C6-2Gs/C6-2GE/C6-2GU/SC7-1U/SC7-1s/ SC9-2U/SC9-2s/SL10-3U/SL10-3s/SCM7-1U/SLM10-3U/SC6-1GU/C6-1/SC6-1MU/ C6-1m/C5-2m/C5-2m-e/SCM4-1U	c1, c2, c3, c5, c7, c8, c14, c15, c16, c17, c18, c19
	C7-3E/C7-3/3C1/3C1s/3C1P/6C 2/6C2P/6C2s/35C20EA/ 35C50EA/35C50EB/35C50P/65C15EAV/65C15EA	c1, c2, c3, c4, c5, c7, c8, c14, c15, c16, c17, c18, c19
	3C5/3C5s/3C5A/3C5P	c1, c2, c3, c4, c5,c7, c8, c14, c15, c16, c17, c18, c19
	SC5-1U/SC5-1E	c1, c2, c3, c5, c7, c14, c15, c16, c17
	SC6-1U/SC6-1E/SC6-1s/SC5-1NE/SC5-1Ns/SC5-1N	c1, c2, c3, c5, c7, c8, c14, c15, c16, c17, c18, c19
	SC8-2U/SC8-2E/SC8-2s	c4, c11, c16
	65EC10EA/65EC10EB/65EC10EC	c1, c2, c3, c4, c5, c7, c14, c15, c16, c17, c18, c19
	65EC10ED	c1, c2, c3, c4, c5, c7, c8, c14, c15, c16, c17, c18, c19
	C4-1/C4-1U/C4-1s	c2, c9
	C9-3Ts	c18, c19
	SC10-2RCs	c1, c3, c14, c15, c16, c17, c18, c19
Linear	L7-3/L7-3s/L7-3E/7L4/7L4s/7L4A/7L4P/7L4B/7L4Bs/ 7L4BP/7L5/7L5P/7L5s/7L6/7L6s/75L38EA/75L38EB/ 75L53EA/75L60EA/75L38P/10L4/10L4s	c1, c2, c3, c4, c5, c7, c8, c14, c15, c16, c17, c18, c19
	65EL60EA/6LE7/6LE7s/6LE7P/6LE5V/6LE5Vs/ 6LE5VP/7LT4/7LT4s/7LT4P/7LT4E/50L60EAV/ 65L50HAV/75L50EAV/75LT38EA	c1, c2, c3, c4, c5, c7, c14, c15, c16, c17, c18, c19
	7LT4s (only applicable for the connector with black cover)	c1, c2, c3, c4, c5, c7, c14, c15, c16, c17, c18, c19
	L9-3/L9-3U/L9-3E/L9-3s/L12-3/L12-3E/L13-3s/ L13-3/L12-4/L12-4s/L14-6N/L14-6Ns/ L14-6NP/L14-6NE/L14-6WE/L14-6Ws/ L14-6WU/L13-3m/L18-6m/L9-3m	c1, c2, c3, c5, c7, c8, c14, c15, c16, c17, c18, c19
	L10-3E/L10-3s	c5
	L11-3U/L11-3VNs/L13-3N/L13-3Ns/L14-3s/ L14-3W/L14-3WU/L14-3Ws/L14-3WE/L14-3m	c1, c2, c3, c5, c7, c8, c14, c15, c16, c17, c18, c19
	L11-4/L11-4s/L14-6/L14-6s/L14-6P/10L24EA	c1, c2, c3, c5, c7, c8, c14, c15, c16, c17, c18, c19

c1: Oxivir$^{TM/MC}$ Tb
c2: PI-SPRAY II
c3: Surfa'safe
c4: TRANSEPTIC
c5: PROTEX^{TM} DISINFECTANT SPRAY
c7: Tristel DUO/Tristel DUO ULT/ Tristel DUO NCU
c8: IODOCLEAN
c9: Protex Spray
c9: Protex Spray
c10: CaviCide
c11: T-Spray
c12: Indican Form
c13: Transeptic Spray
c14: CAVICIDE 1
c15: OXIVIR 1
c16: WIP'ANIOS SPOR'ACTIV
c17: Accel TB Liquid
c18: Sani-HyPerCide GERMICIDAL SPRAY
c19: Sani-24 GERMICIDAL SPRAY

Probe		Spray
Linear	LM14-6E/LM14-6s/LM16-4U	c1, c2, c3, c4, c5, c7, c8, c14, c15, c16, c17, c18, c19
	L20-5U/L20-5s/L20-5E	c2, c9
	L12-3RCs/L12-3VNs/L15-3RCs	c1, c3, c14, c15, c16, c17, c18, c19
	L13-3WE/L13-3WU/L13-3Ws/L15-3WE/ L15-3WU/L15-3Ws/L24-6RCs/L24-6Hs/ L18-5WU/LM18-5WU/LM24-6WU	c7, c16, c18, c19
	L14-5sp/HS14-5Lm	c2, c9
	L14-5WU/L14-5WE/L14-5Ws	c2, c9, c11
	L9-3PAU	c18, c19
	L12-3m/L12-3m-e/L12-3Wm	c1, c2, c3, c4, c5, c7, c8, c14, c15, c16, c17, c18, c19
Phased	P4-2/P4-2s/P4-2E/P4-2NE/P4-2Ns/P10-4E/P10-4s/P10-4/P10-4U/2P2/2P2s/2P2P/P4-2m/P10-4m	c1, c2, c3, c4, c5, c7, c8, c14, c15, c16, c17, c18, c19
	P7-3/P7-3s/P7-3E/P7-3U/P7-3P	c2, c4, c5, c16
	P12-4/P12-4s	c1, c2, c5, c16
	SP5-1U/SP5-1s/SP5-1E/SP5-1	c1, c2, c3, c5, c7, c8, c14, c15, c16, c17, c18, c19
	SP5-1Ns/SP5-1N/SP5-1m	c1, c2, c3, c5, c7, c8, c14, c15, c16, c17, c18, c19
	LFP5-1s/LFP5-1U/LFC5-1s/LFC5-1U	c1, c3, c14, c15, c17, c18, c19
	P8-2s/P8-2/P8-2U/P8-2P/SP9-2U/ SPM6-1U/XP5-1U/P8-2m	c1, c2, c3, c5, c7, c8, c14, c15, c16, c17, c18, c19
	i3P/i3PA/a3P-X/z3P/z3Ps/z3Pt/a3Px/e3P/e3Ps/e3Pt	c1, c2, c3, c7, c8, c14, c15, c17, c19
Endo-cavity	V11-3/V11-3BE/V11-3B/V11-3WE/V11-3Ws/V11-3E/ V11-3s/V11-3m/V11-3m-B	c1, c2, c3, c4, c5, c7, c8, c14, c15, c16, c17, c18, c19
	V11-3HU/V11-3HE/V11-3Hs/V11-3H/V11-3HB/ V11-3HBs/V11-3HBE/SV10-2U/SV10-2s	c1, c2, c3, c5, c7, c8, c14, c15, c16, c17, c18, c19
	V11-3HBs V11-3Hs (only applicable for the connector with black cover)	c1, c2, c3, c5, c7, c8, c14, c15, c16, c17, c18, c19
	V10-4/V10-4s/V10-4B/V10-4Bs/V10-4BP/ 6CV1/6CV1s/6CV1P/V10-4m/V10-4m-B	c1, c2, c3, c4, c5, c7, c8, c14, c15, c16, c17, c18, c19
Biplane	CB10-4/CB10-4P/CB10-4A/CB10-4E/CB10-4s/6LB7/6LB7s/6LB7P/6LB7E/65EB10EA	c1, c2, c3, c4, c5, c7, c14, c15, c16, c17, c18, c19
	ELC13-4U/ELC13-4s/ELC10-4	c1, c3, c7, c14, c15, c17

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c7: Tristel DUO/Tristel DUO ULT/ Tristel DUO NCU
c8: IODOCLEAN
c9: Protex Spray
c9: Protex Spray
c10: CaviCide
c11: T-Spray
c12: Indican Form
c13: Transeptic Spray
c14: CAVICIDE 1
c15: OXIVIR 1
c16: WIP'ANIOS SPOR'ACTIV
c17: Accel TB Liquid
c18: Sani-HyPerCide GERMICIDAL SPRAY
c19: Sani-24 GERMICIDAL SPRAY

Probe		Spray
4D	D7-2/D7-2E/D7-2s/SD8-1/SD8-1E/ SD8-1s/SD8-1U/D6-2/D6-2P/D6-2EA/ D6-2B/D6-2A/D7-2m/D6-2m/SDM9-2U	c1, c2, c3, c4, c5, c7, c8, c14, c15, c16, c17, c18, c19
	D8-2E/D8-2U	c2, c10
	D8-4U	c2, c10, c11
	DE10-3/DE10-3E/DE10-3U/DE10-3s	c2, c10, c11
	DE11-3U/DE11-3s/DE11-3E/DE11-3/ DE11-3WE/DE11-3Ws/DE11-3WU/SDE14-3LU/DE13-5WU/SDE10-2WU/SDE10-2Ws	c1, c2, c3, c5, c7, c8, c14, c15, c17, c18, c19
	DE10-3WU/DE10-3WE (only for the probe with gray strain relief)	c2, c11, c12, c13
	DE10-3Ws DE10-3WU/DE10-3WE (only for the probe with white strain relief)	c18
Composite probe	i5M/z5M/z5Ms/z5Mt/e5M/e5Ms/e5Mt/a5Mx	c1, c2, c3, c7, c8, c14, c15, c17, c19

A.2.3 Solutions

d1: CIDEX® OPA
d2: Cidex Activated Dialdehyde Solution
d3: Minncare® Cold Sterilant
d4: Ster-Bac
d5: Triacid-N
d6: Revital-Ox® Resert® High Level Disinfectant
d7: Gigasept® PAA concentrate
d8: DESCOTON extra
d9: Gigasept® FF(neu)
d10: ANIOXYDE 1000
d11: SALVANIOS pH10
d12: Cavicide Liquid
d13: Metricide
d14: Metricide 28
d15: Metricide OPA Plus
d16: Cidex Plus
d17: Gigasept AF
d18: Osvan
d19: Neojodin
d20: Milton
d21: hibitane
d22: Sterihyde
d23: Metricide 14
d24: Sekusept plus
d25: Wavicide-01
d26: SALVANIOS pH7
d27: Minncare liquid disinfectant
d28: Virusolve® + Concentrate
d29: Virex II 256
d30: UltrOx™ High-Level disinfectant

Probe		Solutions
Convex	C5-1s/C5-1E/C5-1U/C5-1/C5-2/C5-2s/C5-2E/ C6-2E/C6-2/C6-2s/C6-2P/C11-3E/C11-3s/ C11-3U/C11-3/C5-1m/mC5-2m/mC11-3m	d1, d4, d5, d6, d7, d8, d9, d10, d11, d12, d26, d29, d30
	C6-2Gs/C6-2GE/C6-2GU/SC7-1U/SC7-1s/ SC9-2U/SC9-2s/SL10-3U/SL10-3s/SCM7-1U/SLM10-3U/SC6-1GU/C6-1/SC6-1MU/ C6-1m/C5-2m/C5-2m-e/SCM4-1U	d1, d3, d4, d5, d6, d7, d8, d9, d10, d11, d12, d15, d26, d27, d28, d29, d30
	C7-3E/C7-3/3C1/3C1s/3C1P/6C2/6C2P/6C2s/ 35C20EA/35C50EA/35C50EB/ 35C50P/65C15EAV/65C15EA	d1, d2, d3, d4, d5, d6, d7, d8, d9, d10, d11, d12, d13, d14, d15, d26, d27, d28, d29, d30
	3C5/3C5s/3C5A/3C5P	d1, d2, d3, d4, d5, d6, d7, d8, d9, d10, d11, d12, d13, d14, d15, d26, d27, d28, d29, d30
	SC5-1U/SC5-1E	d1, d4, d6, d12, d15, d30
	SC6-1U/SC6-1E/SC6-1s/SC5-1NE/SC5-1Ns/ SC5-1N	d1, d4, d5, d6, d7, d10, d11, d12, d15, d26, d28, d29, d30
	SC8-2U/SC8-2E/SC8-2s	d1, d9, d16, d20, d25
	65EC10EA/65EC10EB/65EC10EC	d1, d2, d3, d4, d5, d6, d12, d13, d14, d15, d27, d28, d30
	65EC10ED	d1, d2, d4, d5, d6, d7, d8, d9, d10, d11, d12, d13, d14, d15, d26, d28, d29, d30
	C4-1/C4-1U/C4-1s	d1, d2, d6, d12, d13, d14, d15, d30
	C9-3Ts	d1, d6, d12, d13, d14, d15, d30
	SC10-2RCs	d12, d28
Linear	L7-3/L7-3s/L7-3E/7L4/7L4s/7L4A/7L4P/ 7L4B/7L4Bs/7L4BP/7L5/7L5P/7L5s/ 7L6/7L6s/75L38EA/75L38EB/75L53EA/ 75L60EA/75L38P/10L4/10L4s	d1, d2, d3, d4, d5, d6, d7, d8, d9, d10, d11, d12, d13, d14, d15, d26, d27, d28, d29, d30
	65EL60EA/6LE7/6LE7s/6LE7P/6LE5V/ 6LE5Vs/6LE5VP/7LT4/7LT4s/7LT4P/ 7LT4E/50L60EAV/65L50HAV/75L50EAV/ 75LT38EA	d1, d2, d3, d4, d5, d6, d12, d13, d14, d15, d27, d28, d30
	7LT4s (only applicable for the connector with black cover)	d1, d2, d3, d4, d5, d6, d12, d13, d14, d15, d27, d28, d30

d1: CIDEX® OPA
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d7: Gigasept® PAA concentrate
d8: DESCOTON extra
d9: Gigasept® FF(neu)
d10: ANIOXYDE 1000
d11: SALVANIOS pH10
d12: Cavicide Liquid
d13: Metricide
d14: Metricide 28
d15: Metricide OPA Plus
d16: Cidex Plus
d17: Gigasept AF
d18: Osvan
d19: Neojodin
d20: Milton
d21: hibitane
d22: Sterihyde
d23: Metricide 14
d24: Sekusept plus
d25: Wavicide-01
d26: SALVANIOS pH7
d27: Minncare liquid disinfectant
d28: Virusolve® + Concentrate
d29: Virex II 256
d30: UltrOx™ High-Level disinfectant

Probe		Solutions
Linear	L9-3/L9-3U/L9-3E/L9-3s/L12-3/L12-3E/L13-3s/ L13-3/L12-4/L12-4s/L14-6N/L14-6Ns/ L14-6NP/L14-6NE/L14-6WE/L14-6Ws/ L14-6WU/L13-3m/L18-6m/L9-3m	d1, d4, d5, d6, d7, d8, d9, d10, d11, d12, d26, d29, d30, d30
	L10-3E/L10-3s	d1, d25
	L11-3U/L11-3VNs/L13-3N/L13-3Ns/L14-3s/ L14-3W/L14-3WU/L14-3Ws/L14-3WE/L14-3m	d1, d3, d4, d5, d6, d7, d8, d9, d10, d11, d12, d15, d26, d27, d28, d29, d30
	L11-4/L11-4s/L14-6/L14-6s/L14-6P/ 10L24EA	d1, d4, d5, d6, d7, d10, d11, d12, d15, d26, d28, d29, d30
	L16-4HE/L16-4Hs/L16-4HU	d1, d2
	L16-4Hs (only applicable for the connector with black cover)	d1, d2
	LM14-6E/LM14-6s/LM16-4U	d1, d2, d3, d4, d5, d6, d7, d8, d9, d10, d11, d12, d13, d14, d15, d26, d27, d28, d29, d30
	L20-5U/L20-5s/L20-5E	d1, d2, d6, d12, d13, d14, d15, d28, d29, d30
	L12-3RCs/L12-3VNs/L15-3RCs	d12, d28
	L13-3WE/L13-3WU/L13-3Ws/L15-3WE/ L15-3WU/L15-3Ws/L24-6RCs/L24-6Hs/ L18-5WU/LM18-5WU/LM24-6WU	d28, d29
	L14-5sp/HS14-5Lm	d1, d2, d6, d12, d13, d14, d15, d30
	L14-5WU/L14-5WE/L14-5Ws	d1, d2, d6, d12, d13, d14, d15, d30
	L30-8U/L33-8U/L33-8s	d2
	L12-3m/L12-3m-e/L12-3Wm	d1, d2, d3, d4, d5, d6, d7, d8, d9, d10, d11, d12, d13, d14, d15, d26, d27, d28, d29, d30

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d7: Gigasept® PAA concentrate
d8: DESCOTON extra
d9: Gigasept® FF(neu)
d10: ANIOXYDE 1000
d11: SALVANIOS pH10
d12: Cavicide Liquid
d13: Metricide
d14: Metricide 28
d15: Metricide OPA Plus
d16: Cidex Plus
d17: Gigasept AF
d18: Osvan
d19: Neojodin
d20: Milton
d21: hibitane
d22: Sterihyde
d23: Metricide 14
d24: Sekusept plus
d25: Wavicide-01
d26: SALVANIOS pH7
d27: Minncare liquid disinfectant
d28: Virusolve® + Concentrate
d29: Virex II 256
d30: UltrOx™ High-Level disinfectant

Probe		Solutions
Phased	P4-2/P4-2s/P4-2E/P4-2NE/P4-2Ns/P10-4E/P10-4s/P10-4/P10-4U/2P2/2P2s/2P2P/P4-2m/P10-4m	d1, d2, d3, d4, d5, d6, d7, d8, d9, d10, d11, d12, d13, d14, d15, d26, d27, d28, d29, d30
	P7-3/P7-3s/P7-3E/P7-3U/P7-3P	d1, d2, d11, d13, d16, d20, d25
	P12-4/P12-4s	d1, d2, d3, d4, d5, d27
	SP5-1U/SP5-1s/SP5-1E/SP5-1	d1, d4, d5, d6, d7, d10, d11, d12, d15, d26, d28, d29, d30
	SP5-1Ns/SP5-1N/SP5-1m	d1, d4, d5, d6, d7, d8, d9, d10, d11, d12, d26, d29, d30
	LFP5-1s/LFP5-1U/LFC5-1s/LFC5-1U	d12, d29
	P8-2s/P8-2/P8-2U/P8-2P/SP9-2U/SPM6-1U/XP5-1U/P8-2m	d1, d3, d4, d5, d6, d7, d8, d9, d10, d11, d12, d15, d26, d27, d28, d29, d30
	i3P/i3PA/a3P-X/z3P/z3Ps/z3Pt/a3Px/e3P/e3Ps/e3Pt	d1, d4, d5, d6, d7, d10, d11, d12, d15, d26, d28, d30
Endo-cavity	V11-3/V11-3BE/V11-3B/V11-3WE/V11-3Ws/V11-3E/V11-3s/V11-3m/V11-3m-B	d1, d2, d3, d4, d5, d6, d10, d11, d12, d13, d14, d15, d26, d27, d29, d30
	V11-3HU/V11-3HE/V11-3Hs/V11-3H/V11-3HB/V11-3HBs/V11-3HBE/SV10-2U/SV10-2s	d1, d3, d4, d5, d6, d7, d8, d9, d10, d11, d12, d15, d26, d27, d28, d29, d30
	V11-3HBs V11-3Hs (only applicable for the connector with black cover)	d1, d3, d4, d5, d6, d7, d8, d9, d10, d11, d12, d15, d26, d27, d28, d29, d30
	V10-4/V10-4s/V10-4B/V10-4Bs/V10-4BP/6CV1/6CV1s/6CV1P/V10-4m/V10-4m-B	d1, d2, d4, d5, d6, d7, d8, d9, d10, d11, d12, d13, d14, d15, d26, d28, d29, d30
Pencil	CW2s/CW5s/CW5	d1, d2, d4, d5
Biplane	CB10-4/CB10-4P/CB10-4A/CB10-4E/CB10-4s/6LB7/6LB7s/6LB7P/6LB7E/65EB10EA	d1, d2, d3, d4, d5, d6, d12, d13, d14, d15, d27, d28, d30
	ELC13-4U/ELC13-4s/ELC10-4	d1, d12, d15, d28

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d25: Wavicide-01
d26: SALVANIOS pH7
d27: Minncare liquid disinfectant
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d29: Virex II 256
d30: UltrOx™ High-Level disinfectant

Probe		Solutions
4D	4CD4/4CD4s/D6-2E	d1, d2, d4
	D7-2/D7-2E/D7-2s/SD8-1/SD8-1E/ SD8-1s/SD8-1U/D6-2/D6-2P/D6-2EA/ D6-2B/D6-2A/D7-2m/D6-2m/SDM9-2U	d1, d2, d3, d4, d5, d6, d10, d11, d12, d13, d14, d15, d26, d27, d28, d30
	D6-2NE/DL14-3U	d1, d18, d19, d20, d21, d22
	D8-2E/D8-2U	d1, d2, d9
	D8-4U	d1, d2, d16, d17
	DE10-3/DE10-3E/DE10-3U/DE10-3s	d1, d2, d16, d17
	DE11-3U/DE11-3s/DE11-3E/DE11-3/DE11-3WE/DE11-3Ws/DE11-3WU/SDE14-3LU/ DE13-5WU/SDE10-2WU/SDE10-2Ws	d1, d3, d4, d5, d6, d7, d8, d9, d10, d11, d12, d15, d26, d27, d30
	DE10-3WU/DE10-3WE (only for the probe with gray strain relief)	d1, d2, d15, d16, d17, d23, d24, d25
	DE10-3Ws DE10-3WU/DE10-3WE (only for the probe with white strain relief)	d1
Ocular	A10e	d1
Composite probe	i5M/z5M/z5Ms/z5Mt/e5M/e5Ms/e5Mt/a5Mx	d1, d4, d5, d6, d7, d10, d11, d12, d15, d26, d28, d30

A.2.4 Devices

e1: TrophonSonex-HL (Used with Trophon/Trophon2)
e2: Germitec UV-C
e3: Vaporized Hydrogen Peroxide (Used with V-PRO Low Temperature Sterilization System)
e4: STERRAD® system

Probe		Devices
Convex	C5-1s/C5-1E/C5-1U/C5-1/C5-2/C5-2s/C5-2E/C6-2E/C6-2/C6-2s/ C6-2P/C11-3E/C11-3s/C11-3U/C11-3/C5-1m/mC5-2m/mC11-3m	e1, e2
	C6-2Gs/C6-2GE/C6-2GU/SC7-1U/SC7-1s/SC9-2U/SC9-2s/SL10-3U/SL10-3s/SCM7-1U/SLM10-3U/SC6-1GU/ C6-1/SC6-1MU/C6-1m/C5-2m/C5-2m-e/SCM4-1U	e1, e2
	C7-3E/C7-3/3C1/3C1s/3C1P/6C2/6C2P/6C2s/35C20EA/ 35C50EA/35C50EB/35C50P/65C15EAV/65C15EA	e1, e2
	3C5/3C5s/3C5A/3C5P	e1, e2
	SC5-1U/SC5-1E	e1, e2
	SC6-1U/SC6-1E/SC6-1s/SC5-1NE/SC5-1Ns/SC5-1N	e1, e2
	SC8-2U/SC8-2E/SC8-2s	e1
	65EC10EA/65EC10EB/65EC10EC	e1, e2, e3
	65EC10ED	e1, e2, e3
	C4-1/C4-1U/C4-1s	e2
	C9-3Ts	e1, e4
	SC10-2RCs	e1, e2
Linear	L7-3/L7-3s/L7-3E/7L4/7L4s/7L4A/7L4P/7L4B/7L4Bs/7L4BP/7L5/7L5P/ 7L5s/7L6/7L6s/75L38EA/75L38EB/75L53EA/75L60EA/75L38P/10L4/ 10L4s	e1, e2
	65EL60EA/6LE7/6LE7s/6LE7P/6LE5V/6LE5Vs/6LE5VP/7LT4/7LT4s/ 7LT4P/7LT4E/50L60EAV/65L50HAV/75L50EAV/75LT38EA	e1, e2, e3
	7LT4s (only for the connector with black cover)	e1, e2, e3, e4
	L9-3/L9-3U/L9-3E/L9-3s/L12-3/L12-3E/L13-3s/L13-3/L12-4/L12-4s/ L14-6N/L14-6Ns/L14-6NP/L14-6NE/L14-6WE/L14-6Ws/L14-6WU/L13-3m/L18-6m/L9-3m	e1, e2
	L10-3E/L10-3s	e1
	L11-3U/L11-3VNs/L13-3N/L13-3Ns/L14-3s/ L14-3W/L14-3WU/L14-3Ws/L14-3WE/L14-3m	e1, e2
	L11-4/L11-4s/L14-6/L14-6s/L14-6P/10L24EA	e1, e2
	L16-4Hs (only for the connector with black cover)	e4
	LM14-6E/LM14-6s/LM16-4U	e1, e2
	L12-3RCs/L12-3VNs/L15-3RCs	e1, e2
	L14-5sp/HS14-5Lm	e1, e2
	L14-5WU/L14-5WE/L14-5Ws	e2
	L12-3m/L12-3m-e/L12-3Wm	e1, e2
Phased	P4-2/P4-2s/P4-2E/P4-2NE/P4-2Ns/P10-4E/P10-4s/P10-4/P10-4U/ 2P2/2P2s/2P2P/P4-2m/P10-4m	e1, e2
	P7-3/P7-3s/P7-3E/P7-3U/P7-3P	e1
	P12-4/P12-4s	e1
	SP5-1U/SP5-1s/SP5-1E/SP5-1	e1, e2
	SP5-1Ns/SP5-1N/SP5-1m	e1, e2
	P8-2s/P8-2/P8-2U/P8-2P/SP9-2U/SPM6-1U/XP5-1U/P8-2m	e1, e2
	i3P/i3PA/z3P/z3Ps/z3Pt/a3Px/e3P/e3Ps/e3Pt	e1

e1: TrophonSonex-HL (Used with Trophon/Trophon2)
e2: Germitec UV-C
e3: Vaporized Hydrogen Peroxide (Used with V-PRO Low Temperature Sterilization System)
e4: STERRAD® system

Probe		Devices
Endo-cavity	V11-3/V11-3BE/V11-3B/V11-3WE/V11-3Ws/ V11-3E/V11-3s/V11-3m/V11-3m-B	e1, e2, e3
	V11-3HU/V11-3HE/V11-3Hs/V11-3H/V11-3HB/ V11-3HBs/V11-3HBE/SV10-2U/SV10-2s	e1, e2
	V11-3HBs V11-3Hs (only for the connector with black cover)	e1, e2, e4
	V10-4/V10-4s/V10-4B/V10-4Bs/V10-4BP/6CV1/6CV1s/6CV1P/V10-4m/V10-4m-B	e1, e2, e3
Biplane	CB10-4/CB10-4P/CB10-4E/CB10-4s	e1, e2, e3
	6LB7/6LB7s/6LB7P/6LB7E/65EB10EA	e2, e3
4D	D7-2/D7-2E/D7-2s/SD8-1/SD8-1E/SD8-1s/SD8-1U/D6-2/ D6-2P/D6-2EA/D6-2B/D6-2A/D7-2m/D6-2m/SDM9-2U	e1
	D6-2NE/DL14-3U	e1
	D8-2E/D8-2U	e1
	DE10-3/DE10-3E/DE10-3U/DE10-3s	e1, e2
	DE11-3U/DE11-3s/DE11-3E/DE11-3/DE11-3WE/DE11-3Ws/ DE11-3WU/SDE14-3LU/DE13-5WU/SDE10-2WU/SDE10-2Ws	e1, e3
	DE10-3WU/DE10-3WE(only for the probe with gray strain relief)	e1, e2
Composite probe	i5M/z5M/z5Ms/z5Mt/e5M/e5Ms/e5Mt/a5Mx	e1

NOTE:

For V-PRO Low Temperature Sterilization System:

- The probe should be placed into a STERIS Sterilization Tray and wrapped with sterilization wrap. In Canada/FDA region, the STERIS Sterilization Tray and sterilization wrap should be cleared by the FDA/HC, such as H600 OneStep® sterilization wrap.
- Start the sterilization system using the Non Lumen Cycle according to the instructions provided by the sterilization system manufacturer.

A.2.5 Powders

f1: Rely+On PeraSafe

Probe		Powders
4D	D8-2E/D8-2U	f1
	D8-4U	f1
	DE10-3/DE10-3E/DE10-3U/DE10-3s	f1
	DE10-3WU/DE10-3WE (only for the probe with gray strain relief)	f1

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Appendix B Composition

B.1 Active Ingredients of the Cleaner

Cleaner	Active Ingredients
MetriZyme/MetriSponge:	Proteinase substilisin
Revital-OX Enzymatic Detergent:	Citric acid, Triethanolamine, Ethanolamine, Ethoxylated coconut oil alkyl amine, Subtilisins (proteolytic enzymes), Glycerine
Endozime and Endozime Sponge:	Subtilisins (proteolytic enzymes)
Prolystica 2X Concentrate Enzymatic Cleaner/klenzyme/ Liquinox/Tristel Pre-Clean Wipes:	enzymatic detergent
ANIOSYME 5:	ionic surfactants, sequestering agent, stabilising agent, enzymatic complex, Excipients
DDN9	N PROPIONATE, N-DIDECYL—N-METHYL-POLY{OXYETHYL)AMMONIUM TETRAPOTASSIUM ETHYLENEDIAMINETETRAACETATE EDETIC ACID

B.2 Active Ingredients of the Disinfectant

Disinfectant	Active Ingredients
Tristel Trio Wipes System/Tristel Jet/Tristel DUO/Tristel DUO ULT/ Tristel DUO NCU/Tristel Sporicidal Wipes:	chlorine dioxide
IODOCLEAN	sodium thiosulfate and excipients
Ster-Bac/PI-SPRAY II/mikrozid® Sensitive Wipes/Clinell Universal Wipes/Sani-Cloth HB/Sani-Cloth Active/T-Spray/Mikorbac Tissues/ Sani-Cloth Germicidal Wipes/ SALVANIOS pH7/SALVANIOS pH10/protex™ ultra disinfectant wipes/CaviWipes XL/CAVICIDE 1:	Quaternary Ammoniums
Tristel Rinse Wipes:	deionized water
CIDEX® OPA:	0.55% Ortho-phthladehyde
DESCOTON extra/Wavicide-01:	glutaraldehyde

Disinfectant	Active Ingredients
Oxivir™/MC Tb:	0.5% hydrogen peroxide
Sani-Cloth® Plus:	n-Alkyl dimethyl benzyl ammonium chloride n-Alkyl ethylbenzyl ammonium chloride
CaviWipes:	isopropanol, ethylene glycol monobutyl ether (2-butoxyethanol), diisobutylphenoxyethoxyethyl dimethyl benzyl ammonium chloride, water
CaviWipes 1:	isopropanol, ethanol, ethylene glycol monobutyl ether (2-butoxyethanol), didecyldime-thylammonium chloride, water
Dispatch Towels:	Sodium hydroxide, Sodium metasilicate, Sodium hypochlorite
SONO™ ULTRASOUND WIPES:	octyl decyl dimethyl ammonium chloride; dioctyl dimethyl ammonium chloride; didecyl dimethyl ammonium chloride; dimethyl benzyl ammonium chloride
Minncare® Cold Sterilant/Minncare liquid disinfectant:	22% Hydrogen Peroxide, 4.5% Peroxyacetic Acid
mikrozid® AF Wipes Jumbo:	25% ethanol; 35% propan-1-ol
CLEANISEPT® WIPES:	0.25g didecyldimethylammoniumchloride 0.5g quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl-, chlorides
Wip'Anios premium:	didecyldimethylammonium chloride 1.4mg/g, polyhexamethylene biguanide hydrochloride 0.96mg/g
Cidex Activated Dialdehyde Solution:	glutaraldehyde
TRANSEPTIC:	isopropyl alcohol, chlorhexidine gluconate
Protex Spray:	Quaternary ammonium compounds di-C8-10-alkyldimethyl, chlorides Water
gigasept® FF(neu):	0.11g succindialdehyde; 0.3g dimethoxytetrahydrofuran; < 5% anionic surfactant; non-ionic surfactants; anti-corrosion compounds; fragrance
gigasept® PAA concentrate:	peracetic acid (5%); hydrogen peroxide: acetic acid; potassium hydroxide: corrosion inhibitor
Protex™ Disinfectant Spray/ Protex™ Disinfectant Wipes:	octyl decyl dimethyl ammonium chloride; dioctyl dimethyl ammonium chloride; didecyl dimethyl ammonium chloride; dimethyl benzyl ammonium chloride
Triacid-N:	N-Dodecylpropan-1,3-diamin; propan-2-ol; isotridecanol, ethoxylated; non-ionic detergent
Surfa'safe:	didecyldimethylammonium chloride 1.4mg/g, polyhexamethylene biguanide hydrochloride 0.96mg/g

Disinfectant	Active Ingredients
Revital-Ox® Resert® High Level Disinfectant/UltrOx™ High-Level disinfectant/TrophonSonex-HL:	hydrogen peroxide
ANIOXYDE 1000:	3% Hydrogen Peroxide
Sani-Cloth AF3:	Quaternary ammonium chlorides.
Metricide OPA Plus:	Ortho-phthladehyde
Metricide/Metricide 14/Metricide 28:	Glutaraldehyde
CaviCide:	isopropanol, ethanol, ethylene glycol monobutyl ether (2-butoxyethanol), diisobutylphe-noxyethoxyethyl dimethyl benzyl ammonium chloride, water
Gigasept AF:	didecyldimethylammonium chloride, glycine, aminoalkyl derivs tridecylpolyethylenglycoether.
Rely+On PeraSafe:	disodium carbonate, citric acid
Cidex Plus:	glutaraldehyde
Sonogel:	carbomer, polyacrylat
Sterihyde:	Glutaraldehyde
Osvan:	Ammonia benzalkonium
Neojodin:	povidone-iodine
Milton:	sodium hypochlorite
Hibitane:	Hlorhexidine
WIP'ANIOS CLEAN'UP:	Association of surfactants, excipients
OXIVIR 1/Oxivir® Tb Wipes/Oxivir 1 Wipes/Accel TB Liquid/Accel TB Wipes:	Hydrogen peroxide
WIP'ANIOS SPOR'ACTIV:	Hydrogen peroxide and peroxyacetic acid mixture stabilized
SANI-CLOTH® BLEACH GERMICIDAL DISPOSABLE WIPE:	Sodium hypochlorite
wip anios excel:	Didecyldimethylammonium chloride, non-ionic surfactants, sequestering agent, excipients
Virusolve® + Pronte all'uso Wipes:	Polycarboxylate, non ionic emulsifier, alcohol, Didecyldimethyl ammonium Chloride, Bis(3-aminopropyl)dodecylamine
Virusolve® + Concentrate:	2-Aminoethanol, Didecyldimethyl ammonium Chloride, Propan-2-ol, Potassium Carbonate
Super Sani-Cloth®	Quaternary Ammoniums
Sani-Cloth® Prime GERMICIDAL DISPOSABLE WIPE	Quaternary Ammoniums
STERRAD® system	Hydrogen peroxide plasma
Sani-HyPerCide GERMICIDAL SPRAY	hydrogen
Sani-24 GERMICIDAL SPRAY	Quaternary Ammoniums, Ethanol
Virex II 256	Quaternary Ammoniums

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Appendix C Registered Disinfectants in Canada

Drug Identification Number /License Number	Name
74736	V-PRO Low Temperature Sterilization System
2981	STERRAD® system
02286467	Revital-Ox® Resert® High Level Disinfectant
100935	Trophon/Trophon2
01963996	Metricide
01964461	Metricide 28
02197170	Wavicide-01
02277484	Minncare liquid disinfectant
02161656	Cavicide Liquid
02247354	Super Sani-Cloth®
02517000	Sani-Cloth® Prime GERMICIDAL DISPOSABLE WIPE

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Appendix D Registered Disinfectants in FDA Region

Registration Number		Name	Microbicidal Method
FDA 510(k)	K190103	V-PRO Low Temperature Sterilization System	Sterilization
	K924434	Cidex Activated Dialdehyde Solution	High-level disinfectant and Sterilization
	K030004	CIDEX® OPA	High-level disinfectant
	K923744	Cidex Plus	High-level disinfectant and Sterilization
	K080420	Revital-Ox® Resert® High Level Disinfectant	High-level disinfectant
	K091022	UltrOx™ High-Level disinfectant	High-level disinfectant
	K103059	Trophon	High-level disinfectant
	K173865	Trophon2	High-level disinfectant
	K930284	Metricide	High-level disinfectant and Sterilization
	K931052	Metricide 28	High-level disinfectant and Sterilization
	K140703	Metricide OPA Plus	High-level disinfectant
	K914749	Wavicide-01	High-level disinfectant and Sterilization
	K954142	STERRAD® system	Sterilization

Registration Number		Name	Microbicidal Method
EPA	9480-6	Sani-Cloth® Plus	Low-level disinfectant
	70627-56	Oxivir™/MC Tb	Low-level disinfectant
	9480-9	Sani-Cloth AF3 (gray)	Low-level disinfectant
	46781-8	CAVIWIPES	Low-level disinfectant
	46781-6	CAVICIDE	Low-level disinfectant
	70627-60	Oxivir® Tb Wipes	Low-level disinfectant
	46781-12	CAVICIDE 1	Low-level disinfectant
	9480-4	Super Sani-Cloth®	Low-level disinfectant
	9480-12	Sani-Cloth® Prime GERMICIDAL DISPOSABLE WIPE	Low-level disinfectant
	9480-14	Sani-HyPerCide GERMICIDAL SPRAY	Low-level disinfectant
	42182-9-9480	Sani-24 GERMICIDAL SPRAY	Low-level disinfectant
	9480-8	SANI-CLOTH® BLEACH GERMICIDAL DISPOSABLE WIPE	Low-level disinfectant
	70627-24	Virex II 256	Low-level disinfectant

P/N: 046-013805-00 (40.0)