**User Manual** 

English

# Disinfectants and Cleaning Solutions for Ultrasound Systems and Transducers



## Contents

1	Read This First	. 5
	Warning Symbols	. 7
	Customer Comments	. 8
	Customer Service	. 8
	User Information Conventions	9
2	Safety	11
	Warnings and Cautions	
	Glutaraldehyde Exposure	14
3	Disinfectants and Cleaning Solutions	15
	Disinfectants and Cleaners for System Surfaces	15
	Guidelines for ARs (Automated Reprocessors)	18
	Guidelines for Automated TEE Transducer Disinfectors and Cleaner Disinfectors	20
	Disinfectants and Cleaning Solutions for Transducers	
	Disinfectant Compatibility by Transducer Name	23
	Transducers Listed by Disinfectant Compatibility	
	Compatible Disinfectants and Cleaning Solutions	33

Contents

## **1** Read This First

The user information for your Philips product describes the most extensive configuration of the product, with the maximum number of options and accessories. Some functions described may be unavailable on your product's configuration.

Transducers are available only in countries or regions where they are approved. For information specific to your region, contact your local Philips representative.

This manual lists the disinfectants and cleaning solutions that are compatible with your Philips ultrasound systems and transducers. The information in this manual is applicable to the following ultrasound systems:

- Affiniti series
- ClearVue series
- CX30
- CX50
- EPIQ series
- HD5
- HD6
- HD7
- HD11 series
- HD15
- iE33
- iU22
- Lumify
- Sparq
- Xperius (distributed by B. Braun)

For information about Philips ultrasound systems or transducers that are not specifically mentioned in this document, see your system's *User Manual*, which contains information that is specific to your system and transducers.

4535 620 14061\_A/795 \* JUL 2019

Always follow the manufacturer's instructions when using disinfectants and cleaning solutions.

Because of the large number of available cleaning and disinfection products, it is impossible to have an all-inclusive list. If you are unsure of the suitability of a particular product, please contact your Philips representative for more information.

For instructions on cleaning and disinfecting ultrasound systems and transducers, see *Care and Cleaning of Ultrasound Systems and Transducers* (available with your system documentation), or the "Transducer and System Care" website:

www.philips.com/transducercare

For a list of the transducers supported by your system, see your system *User Manual* and *User Information Update* (if applicable), which contain information that is specific to your system and transducers.

For more information:

- In North America, call Philips at 800-722-9377.
- Outside North America, contact your local Philips representative.
- Visit the "Transducer and System Care" website:

www.philips.com/transducercare

This document or digital media and the information contained in it is proprietary and confidential information of Philips and may not be reproduced, copied in whole or in part, adapted, modified, disclosed to others, or disseminated without the prior written permission of the Philips Legal Department. This document or digital media is intended to be used either by customers, and is licensed to them as part of their Philips equipment purchase, or to meet regulatory commitments as required by the FDA under 21 CFR 1020.30 (and any amendments to it) and other local regulatory requirements. Use of this document by unauthorized persons is strictly prohibited.

Philips provides this document without warranty of any kind, implied or expressed, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

Philips

Philips has taken care to ensure the accuracy of this document. However, Philips assumes no liability for errors or omissions and reserves the right to make changes without further notice to any products herein to improve reliability, function, or design. Philips may make improvements or changes in the products or programs described in this document at any time.

Philips makes no representation or warranty to the user or any other party with respect to the adequacy of this document for any particular purpose or with respect to its adequacy to produce a particular result. The user's right to recover damages caused by fault or negligence on the part of Philips shall be limited to the amount paid by the user to Philips for the provision of this document. In no event shall Philips be liable for special, collateral, incidental, direct, indirect or consequential damage, losses, costs, charges, claims, demands, or claims for lost profits, data, fees, or expenses of any nature or kind.

Unauthorized copying of this document, in addition to infringing copyright, might reduce the ability of Philips to provide accurate and current information to users.

"xMATRIX" is a trademark of Koninklijke Philips N.V.

"Xperius" is a trademark jointly owned by Koninklijke Philips N.V. and B. Braun Melsungen AG.

Non-Philips product names may be trademarks of their respective owners.

## Warning Symbols

The system may use the following warning symbols. For additional symbols used on the system, see the "Safety" section in your system *User Manual* and *User Information Update*, if applicable.

#### Warning Symbols

Symbol	Description
$\triangle$	Identifies a safety message.
4	Dangerous voltages: Appears adjacent to high-voltage terminals, indicating the presence of voltages greater than 1,000 Vac (600 Vac in the United States).

4535 620 14061\_A/795 \* JUL 2019

Symbol	Description
in the second se	Identifies ESD (electrostatic-discharge) sensitivity of a connector that is not tested as specified in IEC 60601-1-2. Do not touch exposed connector pins. Touching exposed pins can cause electrostatic discharge, which can damage the product.
[]i]	Indicates that the user should see the instructions for use for safety information.

### **Customer Comments**

If you have questions about the user information, or you discover an error in the user information, in the USA, please call Philips at 800-722-9377; outside the USA, please call your local Philips customer service representative.

## **Customer Service**

Customer service representatives are available worldwide to answer questions and to provide maintenance and service. Please contact your local Philips representative for assistance. You can also contact the following office for referral to a customer service representative, or visit this "Contact Us" website:

www.healthcare.philips.com/main/about/officelocator/index.wpd

Philips Ultrasound, Inc.

22100 Bothell Everett Hwy, Bothell, WA 98021-8431, USA

800-722-9377

Philips

## **User Information Conventions**

The user information for your product uses the following typographical conventions to assist you in finding and understanding information:

- All procedures are numbered, and all subprocedures are lettered. You must complete steps in the sequence they are presented to ensure success.
- Bulleted lists indicate general information about a particular function or procedure. They do not imply a sequential procedure.
- The left side of the system is to your left as you stand in front of the system, facing the system. The front of the system is nearest to you as you operate it.
- Transducers and pencil probes both are referred to as transducers, unless the distinction is important to the meaning of the text.

Information that is essential for the safe and effective use of your product appears throughout your user information as follows:



#### WARNING

Warnings highlight information vital to the safety of you, the operator, and the patient.



#### CAUTION

Cautions highlight ways that you could damage the product and consequently void your warranty or service contract or ways that you could lose patient or system data.

#### NOTE

Notes bring your attention to important information that will help you operate the product more effectively.

Read This First

## 2 Safety

Read the information included in this section to ensure the safety of all persons operating and maintaining ultrasound equipment, all patients participating in exams, and to ensure the quality of the system and its accessories.

### Warnings and Cautions

When using the cleaners and disinfectants, observe the following warnings and cautions:



#### WARNING

Not all disinfectants are effective against all types of contamination. Ensure that the disinfectant type is appropriate for the specified system or transducer and that the solution strength and time of contact are appropriate for the intended clinical use.



#### WARNING

Disinfectants are recommended because of their chemical compatibility with product materials, not their biological effectiveness. For the biological effectiveness of a disinfectant, see the guidelines and recommendations of the disinfectant manufacturer, the U.S. Food and Drug Administration, and the U.S. Centers for Disease Control.



#### WARNING

If a pre-mixed solution is used, be sure to observe the solution expiration date.



#### WARNING

The level of disinfection required for a device is dictated by the type of tissue it will contact during use and the type of transducer being used. Ensure that the disinfectant type is appropriate for the type of transducer and the transducer application. For information on the levels of disinfection requirements, see *Care and Cleaning of Ultrasound Systems and Transducers*. Also, see the disinfectant label instructions and the recommendations of the Association for Professionals in Infection Control, the U.S. Food and Drug Administration, the AIUM Official Statements: "Guidelines for Cleaning and Preparing External- and Internal-Use Ultrasound Transducers Between Patients, Safe Handling, and Use of Ultrasound Coupling Gel," and the U.S. Centers for Disease Control.



#### WARNING

Always use protective eyewear and gloves when cleaning, disinfecting, or sterilizing any equipment.



#### CAUTION

Using non-recommended disinfectants, using incorrect solution strengths, or immersing a transducer deeper or longer than recommended can damage or discolor the transducer and voids the transducer warranty.



#### CAUTION

The use of isopropyl alcohol (rubbing alcohol), denatured ethyl alcohol, and alcohol-based products on all transducers is limited. On transducers with USB connectors, the only parts that may be cleaned with alcohol are the transducer housing and lens (acoustic window). On non-TEE transducers, the only parts that may be cleaned with alcohol are the connector housing and the transducer housing and lens. On TEE transducers, the only parts that may be cleaned with alcohol are the connector housing and the transducer housing and lens. On TEE transducers, the only parts that may be cleaned with alcohol are the connector housing and the control housing. Ensure that the solution is only 91% or less isopropyl alcohol or 85% or less denatured ethyl alcohol. Do not clean any other part of a transducer with alcohol (including cables, USB connectors, or strain reliefs), because it can damage those parts of the transducer. This damage is not covered by the warranty or your service contract.



#### CAUTION

Some cleaning and disinfectant products may result in discoloration if residual disinfectant and gel have not been completely removed between each use. Always remove gel completely before using cleaners and disinfectants. If necessary, where compatible for use, 70% isopropyl alcohol may be used to remove residue buildup on system components. If necessary, where compatible for use, 91% or less isopropyl alcohol solutions or 85% or less denatured ethyl alcohol solutions may be used to remove residue buildup on some transducer components.



#### CAUTION

Do not apply adhesive films, such as Tegaderm, to the transducer lens. Application of such films can damage the lens.

4535 620 14061\_A/795 \* JUL 2019



#### CAUTION

On monitor screens, do not use glass cleaners, Dispatch spray, or products containing bleach. Repeated use of such cleaners or products may damage the monitor screen surface. Immediately wipe away approved disinfectants or cleaners to prevent residue buildup. Use cleaners specifically designed for cleaning LCDs or OLEDs.



#### CAUTION

On touch screens, do not use Dispatch spray or products containing bleach or alcohol. Repeated use of such cleaners or products may damage the touch screen surface. Immediately wipe away approved disinfectants or cleaners to prevent residue buildup.

## **Glutaraldehyde Exposure**

The United States Occupational Safety and Health Administration (OSHA) has issued a regulation covering levels of acceptable glutaraldehyde exposure in the working environment. Philips does not sell glutaraldehyde-based disinfectants with its products.

To reduce the presence of glutaraldehyde fumes in the air, be sure to use a covered or ventilated soaking basin. Such systems are commercially available. The most-current information about disinfection products and Philips transducers can be found on the Philips "Transducer and System Care" website:

www.philips.com/transducercare

## **3** Disinfectants and Cleaning Solutions

The following topics list the disinfectants and cleaning solutions that are compatible with your Philips ultrasound system and transducers.

### **Disinfectants and Cleaners for System Surfaces**

#### **Lumify Systems**

It is your responsibility to appropriately clean and disinfect your device in accordance with the device manufacturer's instructions and with your institution's policies for cleaning and disinfecting of medical devices.

#### All Systems Except Lumify

The compatibility of disinfectants and cleaners varies depending on the item on which they are used. The products in the following table are compatible with these system surfaces:

- ECG trunk cables, leads, and electrodes
- External plastic and painted surfaces of system and cart
- System control panel
- Monitor screens and touch screens
- Easy-clip transducer cable managers

Cleaning Solutions for All Surfaces	Cleaning Solutions for Monitor Screens and Touch Screens	Disinfectants for System Surfaces and Touch Screens
Mild soap solution <sup>1</sup>	<ul> <li>Mild soap solution<sup>1</sup></li> <li>Cleaners designed for LCDs or OLEDs</li> <li>Purified water</li> </ul>	<ul> <li>70% isopropyl alcohol (IPA) (not approved for touch screens)</li> <li>Opti-Cide3 (QUAT/IPA based)</li> <li>Oxivir Tb (accelerated hydrogen peroxide based)</li> <li>Protex spray or wipes (compatible with EPIQ series, Affiniti series, and Xperius systems only)</li> <li>Sani-Cloth HB (QUAT based)</li> <li>Sani-Cloth Plus (QUAT/IPA based)</li> <li>PI-Spray II (QUAT based)</li> </ul>

1. Mild soap solutions do not contain any harsh ingredients and are not irritating to the skin. They must not contain fragrance, oils, or alcohols. Hand sanitizers are not approved for use.



#### CAUTION

Do not use abrasive cleaners, or acetone, MEK, paint thinner, or other strong solvents on the system, peripherals, or transducers.



#### CAUTION

Do not use Sani-Cloth AF3 or Super Sani-Cloth to disinfect the system.



#### CAUTION

Do not spill or spray liquid into any system seams, ports, or transducer receptacles.



#### CAUTION

On monitor screens and touch screens, use microfiber cloth; do not use paper towels.



#### CAUTION

On monitor screens, do not use glass cleaners, Dispatch spray, or products containing bleach. Repeated use of such cleaners or products may damage the monitor screen surface. Immediately wipe away approved disinfectants or cleaners to prevent residue buildup. Use cleaners specifically designed for cleaning LCDs or OLEDs.



#### CAUTION

On touch screens, do not use Dispatch spray or products containing bleach or alcohol. Repeated use of such cleaners or products may damage the touch screen surface. Immediately wipe away approved disinfectants or cleaners to prevent residue buildup.



#### CAUTION

System surfaces and transducers are resistant to ultrasound gel, alcohol, and disinfectants, but if you use those substances, you must wipe them off to prevent permanent damage.

For instructions on cleaning and disinfecting ultrasound systems and transducers, see *Care and Cleaning of Ultrasound Systems and Transducers* or the "Transducer and System Care" website: www.philips.com/transducercare

## **Guidelines for ARs (Automated Reprocessors)**

Only some transducers are compatible with an automated reprocessor (AR), and the AR can use only specific solutions or processing conditions.

You can reprocess Philips transducers in an AR if the following criteria are met:

- All chemicals and processing conditions used must be compatible with the specific Philips transducer model being reprocessed, and they must be used under the conditions recommended by the AR manufacturer.
- The temperature used during reprocessing must not exceed 55°C (131°F).
- Except when using the STERRAD 100S system, the transducer connector must be isolated from the cleaning or disinfectant solution throughout the reprocessing. This limits the risk of splashing onto the handle or connector.

The following are the ARs that meet the reprocessing requirements of specific non-TEE Philips transducers. These ARs are either specifically designed for, or provide attachments that support, specific transducer reprocessing.

#### NOTE

In addition to the ARs listed in the following table, if an AR meets the criteria in the preceding list, it is also approved for use.

Manufacturer	Country of Origin	Model	Transducer Type	Compatible Disinfectants or Methods	Processing Conditions
Advanced Sterilization Products	US	STERRAD 100S	L10-4lap	Hydrogen Peroxide	50°C (122°F)
CIVCO Medical Solutions	US	Astra VR	Endocavity <sup>1</sup>	Cidex OPA, Revital-Ox RESERT, MetriCide OPA Plus	32°C (89.6°F)
Germitec	FR	Antigermix S1	Multiple <sup>2</sup>	UV-C	Ambient temperature
Medivators	US	ADVANTAGE PLUS (with optional Ultrasound Probe Hookup Kit)	Multiple <sup>3</sup>	RAPICIDE PA Single Shot	30°C (86°F)
Nanosonics	AU	trophon EPR trophon2	Multiple <sup>4</sup>	Hydrogen Peroxide	50°C (122°F)

#### **Examples: ARs Compatible with Philips Non-TEE Transducers**

- For compatible transvaginal and transrectal transducers, see the Astra VR entry in "Compatible Disinfectants and Cleaning Solutions" on page 33, and use the Compatibility Column number to refer to the appropriate list in "Transducers Listed by Disinfectant Compatibility" on page 28.
- 2. For compatible transducers, see Antigermix S1 in "Compatible Disinfectants and Cleaning Solutions" on page 33 and then use the Compatibility Column number to refer to the appropriate list in "Transducers Listed by Disinfectant Compatibility" on page 28.

- 3. For compatible transducers, see Advantage Plus (with optional Ultrasound Probe Hookup Kit) in "Compatible Disinfectants and Cleaning Solutions" on page 33 and then use the Compatibility Column number to refer to the appropriate list in "Transducers Listed by Disinfectant Compatibility" on page 28.
- 4. For compatible transducers, see trophon EPR and trophon2 in "Compatible Disinfectants and Cleaning Solutions" on page 33 and then use the Compatibility Column number to refer to the appropriate list in "Transducers Listed by Disinfectant Compatibility" on page 28.

## **Guidelines for Automated TEE Transducer Disinfectors and Cleaner Disinfectors**

Only some transducers are compatible with an automated TEE transducer disinfector or an automated TEE transducer cleaner disinfector, and the automated device can use only specific solutions.

You can reprocess Philips TEE transducers in an automated TEE transducer disinfector or an automated TEE transducer cleaner disinfector if the following criteria are met:

- All chemicals and processing conditions used must be compatible with the specific Philips TEE transducer model being reprocessed, and they must be used under the conditions recommended by the reprocessor manufacturer.
- The temperature used during reprocessing must not exceed 45°C (113°F).
- The TEE transducer handle and connector must be isolated from the cleaning or disinfectant solution throughout the reprocessing, including handle support stands and sealing mechanisms. This limits the risk of splashing onto the handle or connector.
- The use of protective barriers or devices intended to isolate the handle and connector to allow the entire transducer to be completely submerged or exposed to the disinfectant solution during reprocessor use is prohibited.
- Heated drying methods may not be used.

Philips

The following table provides examples of reprocessors that meet the reprocessing requirements for Philips TEE transducers. These reprocessors are either specifically designed for, or provide attachments that support, TEE transducer reprocessing.

#### NOTE

In addition to the reprocessors listed in the following table, other automated TEE transducer disinfectors or automated TEE transducer cleaner disinfectors that have FDA or CE mark clearance for use with TEE transducers and that meet the criteria in the preceding list are approved for use.

Manufacturer	Country of Origin	Model	Transducer Type	Compatible Disinfectants or Methods	Processing Conditions
CIVCO Medical Solutions	US	Astra TEE	TEE	Cidex OPA, MetriCide OPA Plus, Revital-Ox RESERT	40°C (104°F)
CS Medical	US	TD-100 Reprocessor	TEE	TD-5 HLD, TD-8 HLD	38°C to 40°C (100.4°F to 104°F)
		TEEClean Reprocessor	TEE	TD-5 HLD, TD-8 HLD, TEEZyme Cleaner	38°C to 40°C (100.4°F to 104°F)
Germitec	FR	Antigermix E1	TEE	UV-C	Ambient temperature

#### **Examples: Reprocessors Compatible with Philips TEE Transducers**

4535 620 14061\_A/795 \* JUL 2019

Manufacturer	Country of Origin	Model	Transducer Type	Compatible Disinfectants or Methods	Processing Conditions
Medivators	US	ADVANTAGE PLUS (with optional TEE/TOE Probe Hookup Kit)	TEE	RAPICIDE PA Single Shot	30°C (86°F)
		DSD-201 (with optional Bridge Kit)	TEE	RAPICIDE Glut, RAPICIDE PA, RAPICIDE OPA/28	30°C (86°F)
		DSD EDGE (with optional Bridge Kit)	TEE	RAPICIDE PA Single Shot	30°C (86°F)
Soluscope	FR	Serie TEE	TEE	Soluscope P/ Soluscope A, Proxy P/Proxy A	40°C (104°F)

For instructions on cleaning and disinfecting TEE transducers with automated TEE transducer disinfectors or automated TEE transducer cleaner disinfectors, see *Care and Cleaning of Ultrasound Systems and Transducers*.

## **Disinfectants and Cleaning Solutions for Transducers**

This section includes three tables that allow you to find the disinfectant and cleaning solutions that are available for your transducers.

• "Disinfectant Compatibility by Transducer Name" on page 23: Lists the transducers in alphanumeric order, with references to their disinfectants and cleaning solutions compatibility. Find your transducer in the Transducer Name column, and then see the Compatibility column reference for the appropriate Compatibility column of "Compatible Disinfectants and Cleaning Solutions" on page 33.

Philips

- "Transducers Listed by Disinfectant Compatibility" on page 28: Organizes the transducers by the corresponding Compatibility column of "Compatible Disinfectants and Cleaning Solutions" on page 33. Use this table to quickly understand which transducers correspond to the numbered Compatibility columns.
- "Compatible Disinfectants and Cleaning Solutions" on page 33: Lists disinfectants and cleaning solutions compatible with Philips transducers. The numbered Compatibility columns indicate the disinfectants and cleaning solutions compatibility with the corresponding transducers. Use either of the two transducers tables to determine which Compatibility column applies to your transducer.

#### **Disinfectant Compatibility by Transducer Name**

This table lists transducers in alphanumeric order, with references to their disinfectants and cleaning solutions compatibility. Find your transducer (and system, if designated) in the Transducer Name column, and then see Compatibility Column to identify the applicable Compatibility column of "Compatible Disinfectants and Cleaning Solutions" on page 33. If a system is not designated, then all versions of the transducer use the same Compatibility column.

For a list of the transducers supported by your system, see your system *User Manual* and *User Information Update*, if applicable.

Transducer Name (System Name)	Compatibility Column
1.9MHz CW Pencil	3
1.9MHz TCD	3
3D6-2	1
3D8-4	1
3D9-3v (HD11, HD15, iU22)	1
3D9-3v (Affiniti, ClearVue, EPIQ)	2
5.0MHz CW Pencil	3

4535 620 14061\_A/795 \* JUL 2019

Transducer Name (System Name)	Compatibility Column
7.5MHz Endo	1
BP10-5ec	2
C5-1 (CX50, HD15, iE33, iU22)	1
C5-1 (Affiniti, EPIQ, Sparq)	2
C5-2 (HD5, HD6, HD7, HD11, HD15, iE33, iU22)	1
C5-2 (ClearVue)	2
C5-2 (Lumify, Xperius)	8
C6-2 Compact (CX30, Sparq)	1
C6-2 Compact (Affiniti)	2
C6-3	1
C8-4v	1 or 2 <sup>+</sup>
C8-5	1
C8-5 Compact (CX30, CX50)	1
C8-5 Compact (Affiniti, EPIQ)	2
C9-2	2
C9-3io	7
C9-3v	2
C9-4	1
C9-4ec	1
C9-4v	2
C9-4v Compact	2
C9-5ec	1

Transducer Name (System Name)	Compatibility Column
C10-3v	2
C10-4ec	2
D2cwc	3
D2tcd	3
D5cwc	3
eL18-4	2
L8-4	1
L9-3	1
L10-4lap	6
L11-3	1
L12-3 (HD5, HD6, HD7, HD11, HD15)	1
L12-3 (Affiniti, CX50, EPIQ)	2
L12-3ERGO (Affiniti, EPIQ)	2
L12-4 (ClearVue)	2
L12-4 (Lumify, Xperius)	8
L12-4 Compact (CX30, Sparq)	1
L12-4 Compact (Affiniti)	2
L12-5 38 mm	1
L12-5 50 mm Compact (CX50, Sparq)	1
L12-5 50 mm Compact (Affiniti, EPIQ)	2
L12-5 50 mm	1
L15-7io (HD11, HD15, iE33, iU22)	1 or 2 <sup>‡</sup>

Transducer Name (System Name)	Compatibility Column
L15-7io (Affiniti, CX30, CX50, EPIQ, Sparq)	2
L17-5	1
L18-5	2
mC7-2	2
OMNI III TEE	5
S3-1	1
S4-1 (iU22)	1
S4-1 (ClearVue)	2
S4-1 (Lumify)	8
<u>S4-2</u>	1
S4-2 Compact (CX30, CX50, Sparq)	1
S4-2 Compact (Affiniti)	2
S5-1 (CX50, iE33, iU22, Sparq)	1
S5-1 (Affiniti, EPIQ)	2
S5-2	1
S6-2mpt	5
S7-2t	5
S7-3t	4
S8	1
S8-3	1
S8-3 Compact (CX30, CX50, HD5)	1
S8-3 Compact (Affiniti, EPIQ)	2

Transducer Name (System Name)	Compatibility Column
S8-3t	4
S9-2	2
S12	1
S12-4	1
S12-4 Compact (CX50)	1
S12-4 Compact (Affiniti, EPIQ)	2
TCD	3
V6-2 (HD11 XE, HD15, iU22)	1
V6-2 (Affiniti, ClearVue, EPIQ, HD5)	2
V9-2	2
V8-4	1
VL13-5	1
VL13-5 Compact	2
X3-1	1
X5-1 (iE33)	1
X5-1 (Affiniti, EPIQ)	2
X6-1	2
X7-2 (iE33, iU22)	1
X7-2 (EPIQ)	2
X7-2t	5
X8-2t	5
XL14-3	2

+	Use Compatibility Column 2 for C8-4v models with the following part numbers:
	• Part number 45356117292 <i>x</i> , where <i>x</i> is 3 or greater
	• Part number 45356128750x, where x is 2 or greater
	• Part number 45356131895 <i>x</i> , where <i>x</i> is 1 or greater
	• Part number 45356149748x, where x is 1 or greater
	• Part number 45356149749x, where x is 1 or greater
	• Part number 45356168452 <i>x</i> where <i>x</i> is 1 or greater
	Use Compatibility Column 1 for C8-4v models with other part numbers.
	To find the part number, see the inside of the connector housing.
‡	Use Compatibility Column 2 for L15-7io models with the following part numbers:
	• Part number 45356140781 <i>x</i> , where <i>x</i> is 1 or greater
	• Part number 45356141827 <i>x</i> , where <i>x</i> is 1 or greater
	Use Compatibility Column 1 for L15-7io models with other part numbers.
	To find the part number, see the inside of the connector housing.

#### Footnotes

#### **Transducers Listed by Disinfectant Compatibility**

This table organizes the transducers by the corresponding Compatibility column of "Compatible Disinfectants and Cleaning Solutions" on page 33. The colors of the column headings also correspond to the color of the Compatibility column. If a system is not designated, then all versions of the transducer use the same Compatibility column.

For a list of the transducers supported by your system, see your system *User Manual* and *User Information Update*, if applicable.

#### Transducers Listed by Disinfectant Compatibility

3D6-2	L12-5 50 mm
3D8-4	L15-7io (HD11, HD15, iE33, iU22) <sup>2</sup>
3D9-3v (HD11, HD15, iU22)	L17-5
7.5MHz Endo	S3-1
C5-1 (CX50, HD15, iE33, iU22)	S4-1 (iU22)
C5-2 (HD5, HD6, HD7, HD11, HD15, iE33, iU22)	S4-2
C6-2 Compact (CX30, Sparq)	S4-2 Compact (CX30, CX50, Sparq)
C6-3	S5-1 (CX50, iE33, iU22, Sparq)
C8-4v <sup>1</sup>	S5-2
C8-5	S8
C8-5 Compact (CX30, CX50)	S8-3
C9-4	S8-3 Compact (CX30, CX50, HD5)
C9-4ec	S12
C9-5ec	S12-4
L8-4	S12-4 Compact (CX50)
L9-3	V6-2 (HD11 XE, HD15, iU22)
L11-3	V8-4
L12-3 (HD5, HD6, HD7, HD11, HD15)	VL13-5
L12-4 Compact (CX30, Sparq)	X3-1
L12-5 38 mm	X5-1 (iE33)
L12-5 50 mm Compact (CX50, Sparq)	X7-2 (iE33, iU22)

Transducers (System Names) Covered by Compatibility Column 2		
3D9-3v (Affiniti, ClearVue, EPIQ)	L12-5 50 mm Compact (Affiniti, EPIQ)	
BP10-5ec	L15-7io (Affiniti, CX30, CX50, EPIQ, Sparq)	
C5-1 (Affiniti, EPIQ, Sparq)	L15-7io (HD11, HD15, iE33, iU22) <sup>2</sup>	
C5-2 (ClearVue)	L18-5	
C6-2 Compact (Affiniti)	mC7-2	
C8-4v <sup>1</sup>	S4-1 (ClearVue)	
C8-5 Compact (Affiniti, EPIQ)	S4-2 Compact (Affiniti)	
C9-2	S5-1 (Affiniti, EPIQ)	
C9-3v	S8-3 Compact (Affiniti, EPIQ)	
C9-4v	S9-2	
C9-4v Compact	S12-4 Compact (Affiniti, EPIQ)	
C10-3v	V6-2 (Affiniti, ClearVue, EPIQ, HD5)	
C10-4ec	V9-2	
eL18-4	VL13-5 Compact	
L12-3 (Affiniti, CX50, EPIQ)	X5-1 (Affiniti, EPIQ)	
L12-3ERGO (Affiniti, EPIQ)	X6-1	
L12-4 (ClearVue)	X7-2 (EPIQ)	
L12-4 Compact (Affiniti)	XL14-3	

Transdu	cers Covered by Compatibility Column 3
1.9MHz	CW Pencil
1.9MHz	TCD
5.0MHz	CW Pencil
D2cwc	
D2tcd	
D5cwc	
TCD	
Transdu	cers Covered by Compatibility Column 4
S7-3t	
S8-3t	
Transdu	cers Covered by Compatibility Column 5
OMNI III	TEE
S6-2mpt	
S7-2t	
X7-2t	
X8-2t	
Transdu	cers Covered by Compatibility Column 6
L10-4lap	

Transducers Covered by Compatibility Column 7

C9-3io

Transducers Covered by Compatibility Column 8

C5-2 (Lumify, Xperius)

L12-4 (Lumify, Xperius)

S4-1 (Lumify)

#### Footnotes

1	Use Compatibility Column 2 for C8-4v models with the following part numbers:
	• Part number 45356117292x, where x is 3 or greater
	• Part number 45356128750 <i>x</i> , where <i>x</i> is 2 or greater
	• Part number 45356131895 <i>x</i> , where <i>x</i> is 1 or greater
	• Part number 45356149748 <i>x</i> , where <i>x</i> is 1 or greater
	• Part number 45356149749 <i>x</i> , where <i>x</i> is 1 or greater
	• Part number 45356168452x where x is 1 or greater
	Use Compatibility Column 1 for C8-4v models with other part numbers.
	To find the part number, see the inside of the connector housing.
2	Use Compatibility Column 2 for L15-7io models with the following part numbers:
	• Part number 45356140781 <i>x</i> , where <i>x</i> is 1 or greater
	• Part number 45356141827 <i>x</i> , where <i>x</i> is 1 or greater
	Use Compatibility Column 1 for L15-7io models with other part numbers.
	To find the part number, see the inside of the connector housing.

#### **Compatible Disinfectants and Cleaning Solutions**

The following table lists the disinfectants and cleaning solutions compatible with the transducers available for your Philips ultrasound systems. Use the tables in "Transducers Listed by Disinfectant Compatibility" on page 28 or "Disinfectant Compatibility by Transducer Name" on page 23 to find your transducer and its corresponding Compatibility column.



#### CAUTION

The use of isopropyl alcohol (rubbing alcohol), denatured ethyl alcohol, and alcohol-based products on all transducers is limited. On transducers with USB connectors, the only parts that may be cleaned with alcohol are the transducer housing and lens (acoustic window). On non-TEE transducers, the only parts that may be cleaned with alcohol are the connector housing and the transducer housing and lens. On TEE transducers, the only parts that may be cleaned with alcohol are the connector housing and the transducer housing and lens. On TEE transducers, the only parts that may be cleaned with alcohol are the connector housing and the control housing. Ensure that the solution is only 91% or less isopropyl alcohol or 85% or less denatured ethyl alcohol. Do not clean any other part of a transducer with alcohol (including cables, USB connectors, or strain reliefs), because it can damage those parts of the transducer. This damage is not covered by the warranty or your service contract.

Based on material-compatibility testing, product-use profile, and active ingredients, Philips has generically approved for use the following types of *low-level* and *intermediate-level* disinfectants used as a spray or wipe for surface (skin contact) and transvaginal or transrectal transducers, according to the compatibility restrictions in the disinfectants table.



#### CAUTION

Philips has not generically approved for use the following on transesophageal or laparoscopic transducers.

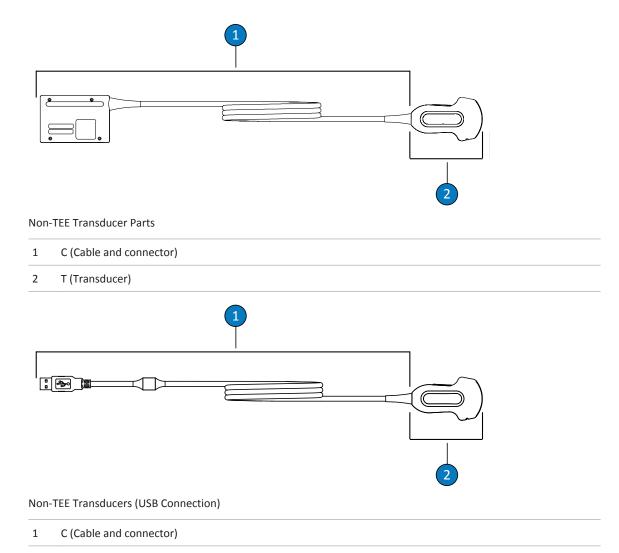
- Sodium-hypochlorite based (for example 10% household bleach solution with active sodium hypochlorite at approximately 0.6%)
- Quaternary-ammonium (QUAT) based (for example, products that contain n-alkyl xbenzyl ammonium chloride solution where x can be any organic functional group such as ethyl and methyl, and so on; concentration at use should be less than 0.8% total for all QUATs listed)
- Accelerated hydrogen-peroxide based (0.5% hydrogen peroxide maximum)
- Alcohol or alcohol-plus-QUAT based (product alcohol content cannot exceed 91% isopropyl alcohol or 85% denatured ethyl alcohol)
- Products not specifically listed in the compatibility table but with similar active ingredients, as indicated in this list, and marketed for medical use

Always follow the manufacturer's instructions when using disinfectants and cleaning solutions.

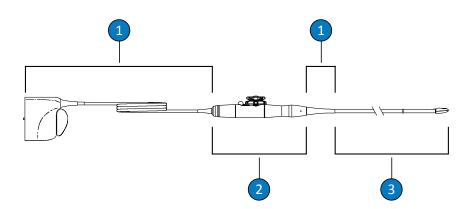
Because of the large number of available cleaning and disinfection products, it is impossible to have an all-inclusive list. If you are unsure of the suitability of a particular product, please contact your Philips representative for assistance.

#### **Disinfectants and Cleaning Solutions Table Legend**

Country of Origin	Disinfectant Type	Compatibility
AU = Australia	CL = Cleaner	C = Approved for use on the cable and
CA = Canada	HLD = High-level disinfectant	connector (never immerse or soak a
DE = Germany	ILD = Intermediate-level disinfectant	connector); exceptions where not approved for the connector are noted
ES = Spain	LLD = Low-level disinfectant	H = Approved for use on the handle and
FR = France	S = Sterilant	handle housing
JP = Japan		N = Not approved for use
UK = United Kingdom		T = Approved for use on the transducer
US = United States		



2 T (Transducer)



#### **TEE Transducer Parts**

- 1 C (Cable, connector, and strain reliefs)
- 2 H (Handle and steering mechanism)
- 3 T (Transducer and flexible shaft)

#### NOTE

Use the tables in "Transducers Listed by Disinfectant Compatibility" on page 28 or "Disinfectant Compatibility by Transducer Name" on page 23 to find your transducer and its corresponding Compatibility Column.

Solution/	Country of	Qualified Use	Active Ingredient	Disinfectant	Comp	atibilit	y Colur	nns				
System	Origin			Туре	1	2	3	4	5	6	7	8
Accel Wipes (all types)	CA	Wipe	Hydrogen Peroxide	LLD, ILD	T,C	T,C	T,C	Т,С,Н	т,с,н	т,с,н	T,C	T,C
Acecide	JP	Soak <sup>1</sup>	Peracetic Acid	HLD, S	N	N	N	N	Т	N	N	N
Advantage Plus (with optional TEE/TOE Probe Hookup Kit)	US	AR	Peracetic Acid	HLD	Ν	Ν	Ν	T	T <sup>7</sup>	Ν	Ν	Ν
Advantage Plus (with optional Ultrasound Probe Hookup Kit)	US	AR	Peracetic Acid	HLD	Ν	T <sup>6</sup> ,C <sup>8</sup>	Ν	Ν	Ν	Ν	T <sup>6</sup> ,C <sup>8</sup>	Ν
Aidal Plus	AU	Soak 1	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	Т,С <sup>8</sup>	N	т	т	т	T,C <sup>8</sup>	т
Alkaspray	FR	Spray/Wipe	Alcohol, Alkylamine	LLD, ILD	Т	Т	т	н	н	т,н	т	т
Anios Clean Excel D	FR	Spray/Wipe/ Soak <sup>1</sup>	QUAT, Chlorhexidine gluconate, Surfactant	CL	T,C	T,C	T,C	Т	Т	Т	T,C	T,C
Aniosept Activ	FR	Soak <sup>1</sup>	Peracetic Acid	HLD, S	N	T,C <sup>8</sup>	N	N	Т	т	Т,С <sup>8</sup>	т
ANIOXY DM	FR	Soak <sup>1</sup>	Peracetic Acid	HLD, S	N	T,C <sup>8</sup>	N	N	т	т	T,C <sup>8</sup>	т
Anioxyde 1000	FR	Soak <sup>1</sup>	Peracetic Acid	HLD	N	T,C <sup>8</sup>	N	N	т	т	T,C <sup>8</sup>	т

## **Disinfectants and Cleaning Solutions Compatibility**

Solution/	Country of	Qualified Use	Active Ingredient	Disinfectant	Comp	atibilit	ty Colur	nns				
System	Origin			Туре	1	2	3	4	5	6	7	8
Antigermix E1	FR	E1 System	UV-C	HLD	N	N	N	T,C <sup>8</sup> , H <sup>5</sup>	T,C <sup>8</sup> , H <sup>5</sup>	N	N	N
Antigermix S1	FR	S1 System	UV-C	HLD	T, C <sup>2,8</sup>	T, C <sup>2,8</sup>	N	N	N	N	T,C <sup>8</sup>	N
ASTRA TEE	US	AR	Solution dependent	HLD	N	N	N	T	T	N	N	N
ASTRA VR	US	AR	Solution dependent	HLD	Τ <sup>9</sup>	T <sup>9</sup>	Ν	N	N	N	N	N
Bacillol 30 Foam	DE	Spray/Wipe	Alcohol, Alkylamine	LLD, ILD	т	Т	т	Н	Н	т,н	Т	т
Banicide Plus	US	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	T,C <sup>8</sup>	N	Т	т	т	T,C <sup>8</sup>	т
Bleach (0.6% NaOCl Max)	All	Spray/Wipe	Sodium Hypochlorite	LLD, ILD	T,C	T,C	T,C	С	С	С	T,C	T,C
CaviWipes	US	Wipe	Alcohol, QUAT	LLD, ILD	т	т	т	н	н	т,н	т	т
Cidex	US	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	Т	т	T,C <sup>8</sup>	т
Cidex 7	US	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	т	т	T,C <sup>8</sup>	т
Cidex OPA	US	Soak <sup>1</sup>	Ortho- phthalaldehyde	HLD	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	т	т	T,C <sup>8</sup>	т
Cidex Plus	US	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	Т	т	T,C <sup>8</sup>	т
Cleanisept Wipes	DE	Spray/Wipe	QUAT	LLD, ILD	T,C	T,C	T,C	Т,С,Н	T,C,H	т,с,н	T,C	T,C
Clinell Sporicidal Wipes	UK	Wipe	Peracetic Acid, Surfactant	CL, HLD	T,C	T,C	T,C	N	T,C,H	T,C,H	T,C	T,C

Solution/		Qualified Use	Active Ingredient		Comp	atibilit	y Colur	nns				
System	Origin			Туре	1	2	3	4	5	6	7	8
Clinell Universal Sanitising Wipes	UK	Spray/Wipe	QUAT, Biguanide	LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	T,C,H	T,C	T,C
Clorox Healthcare Bleach Germicidal Cleaner	US	Spray/Wipe	Sodium Hypochlorite	LLD, ILD	T,C	T,C	T,C	С	С	С	T,C	T,C
Clorox Healthcare Hydrogen Peroxide Cleaner Disinfectants	US	Spray/Wipe	Hydrogen Peroxide	LLD, ILD	T,C	T,C	T,C	Т,С,Н	Т,С,Н	Т,С,Н	T,C	T,C
Combi- Instruments-N	DE	Soak <sup>1</sup>	Glutaraldehyde & formacetale blend	HLD	T,C <sup>8</sup>	T,C <sup>8</sup>	N	N	Т	т	T,C <sup>8</sup>	т
Denatured Ethyl Alcohol (85% maximum)	All	Spray/Wipe	Denatured Ethyl Alcohol, Water	LLD, ILD	Т	Т	т	Н	Н	т,н	Т	Т
Descoton Extra	DE	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	Т	т	T,C <sup>8</sup>	т
Dispatch	US	Spray/Wipe	Sodium Hypochlorite	LLD, ILD	T,C	T,C	T,C	с	С	С	T,C	T,C

Solution/		Qualified Use	Active Ingredient	Disinfectant	Comp	atibilit	y Colur	nns				
System	Origin			Туре	1	2	3	4	5	6	7	8
DSD 201 (with optional Bridge Kit)	US	AR	Solution dependent	HLD	N	N	N	T	T	N	N	Ν
DSD EDGE (with optional Bridge Kit)	US	AR	Peracetic Acid	HLD	N	N	N	T	T	N	N	N
Endosporine	FR	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	т	т	T,C <sup>8</sup>	т
Endozime Enzymatic (all types)	US	Pre-cleaner	Enzymes, Surfactant	CL	T,C	T,C	N	T,C,H	T,C,H	Т	T,C	Т
Enzol	US	Pre-cleaner	Enzymes, Surfactant	CL	T,C	T,C	N	Т,С,Н	T,C,H	т	T,C	Т
Epizyme Rapid	AU	Pre-cleaner	Enzymes, Surfactant	CL	T,C	T,C	N	Т,С,Н	T,C,H	т	T,C	т
Gigasept FF (neu)	DE	Soak <sup>1</sup>	Succinic dialdehyde	HLD	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	т	N	T,C <sup>8</sup>	т
Gigasept PA	DE	Soak <sup>1</sup>	Peracetic Acid	HLD	N	T,C <sup>8</sup>	N	N	т	т	T,C <sup>8</sup>	т
Gigasept PAA Concentrate	DE	Soak <sup>1</sup>	Peracetic Acid	HLD	N	T,C <sup>8</sup>	N	N	т	т	Т,С <sup>8</sup>	т
Hexanios G+R	FR	Soak <sup>1</sup>	QUAT, Biguanide, Surfactant	CL, LLD, ILD	T,C	T,C	N	N	N	N	T,C	т
Hibiclens (4% Max)	US	Pre-cleaner	Chlorhexidine gluconate	CL	T,C	T,C	т	T,C	T,C	T,C	T,C	T,C
Incidin	DE	Spray/Wipe	Alcohol	LLD, ILD	т	т	т	н	н	т,н	т	т

Solution/		Qualified Use	Active Ingredient	Disinfectant	Comp	atibilit	y Colur	nns				
System	Origin			Туре	1	2	3	4	5	6	7	8
Incidin OxyWipe	DE	Spray/Wipe	Hydrogen Peroxide, Surfactant	CL, LLD, ILD	T,C	T,C	T,C	T,C,H	Т,С,Н	Т,С,Н	T,C	T,C
Incidin OxyWipe S	DE	Spray/Wipe	Hydrogen Peroxide, Surfactant	CL, LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	Т,С,Н	T,C	T,C
Incidin OxyFoam	DE	Spray/Wipe	Hydrogen Peroxide, Surfactant	CL, LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	Т,С,Н	T,C	T,C
Incidin OxyFoam S	DE	Spray/Wipe	Hydrogen Peroxide, Surfactant	CL, LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	Т,С,Н	T,C	T,C
Incidin Plus	DE	Soak <sup>1</sup>	Glucoprotamine	HLD	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	т	т	T,C <sup>8</sup>	т
Incidin Rapid	DE	Spray/Wipe	QUAT, Glutaraldehyde	LLD, ILD	T,C	T,C	T,C	т	т	т	T,C	T,C
Incidur Spray	DE	Spray/Wipe	Alcohol, QUAT, Aldehyde	LLD, ILD	т	т	т	н	н	т,н	Т	Т
Instruzyme	FR	Pre-cleaner	Enzymes, QUAT, Biguanide	CL	T,C	T,C	N	т	Т	т	T,C	Т
Intercept Detergent	US	AR	Surfactant	CL	T,C	T,C	N	Т	Т	т	T,C	Т
Intercept Wipes	US	Wipe	Surfactant	CL	T,C	T,C	N	T,C,H	T,C,H	т	T,C	T,C
Isopropyl Alcohol (91% maximum)	All	Spray/Wipe	lsopropyl Alcohol, Water	LLD, ILD	Т	т	т	н	Н	т,н	Т	Т

Solution/		Qualified Use	Active Ingredient	Disinfectant	Comp	atibilit	y Colur	nns				
System	Origin			Туре	1	2	3	4	5	6	7	8
Klenzyme	US	Pre-cleaner	Enzymes, Surfactant	CL	T,C	T,C	N	Т,С,Н	T,C,H	т	T,C	Т
Korsolex Basic	FR	Soak <sup>1</sup>	Aldehyde Releasing	HLD	Т,С <sup>8</sup>	T,C <sup>8</sup>	N	т	Т	т	T,C <sup>8</sup>	Т
Korsolex Extra	FR	Soak <sup>1</sup>	QUAT, Aldehyde	HLD	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	т	т	T,C <sup>8</sup>	т
Korsolex PAE	FR	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	Т	т	т,С <sup>8</sup>	т
Matrix Biofilm Remover	AU	Pre-cleaner	Enzymes, Surfactant	CL	T,C	T,C	т	Т,С,Н	T,C,H	т	T,C	Т
MaxiCide Plus	US	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	т	т	T,C <sup>8</sup>	т
MedDis	UK	Soak <sup>1</sup>	QUAT, Sulfamic Acid	HLD	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	Т	т	Т,С <sup>8</sup>	Т
Medistel	UK	Soak <sup>1</sup>	QUAT, Sulfamic Acid	HLD	T,C <sup>8</sup>	Т,С <sup>8</sup>	N	т	Т	т	Т,С <sup>8</sup>	Т
Medizyme	AU	Pre-cleaner	Enzymes, Surfactant	CL	T,C	T,C	N	Т,С,Н	T,C,H	т	T,C	Т
MetriCide	US	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	т	т	T,C <sup>8</sup>	т
MetriCide 28	US	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	т	т	T,C <sup>8</sup>	т
MetriCide OPA Plus	US	Soak <sup>1</sup>	Ortho- phthalaldehyde	HLD	T,C <sup>8</sup>	Т,С <sup>8</sup>	N	т	Т	т	Т,С <sup>8</sup>	Т
MetriCide Plus 30	US	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	Т,С <sup>8</sup>	N	т	Т	т	T,C <sup>8</sup>	Т
MetriZyme	US	Pre-cleaner	Enzymes, Surfactant	CL	T,C	T,C	N	т,с,н	T,C,H	т	T,C	Т

Solution/		Qualified Use	Active Ingredient		Comp	atibilit	y Colur	nns				
System	Origin			Туре	1	2	3	4	5	6	7	8
Mikrobac Virucidal Tissues	DE	Wipe	QUAT	LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	T,C,H	T,C	T,C
mikrozid PAA wipes	DE	Wipe	Peracetic Acid	LLD, ILD	N	T,C	T,C	N	T,C	т,с,н	T,C	T,C
Mild Soap Solution <sup>4</sup>	All	Pre-cleaner	Surfactant	CL	T,C	T,C	T,C	Т,С,Н	T,C,H	т	T,C	Т
Milton	AU	Spray/Wipe	Sodium Hypochlorite	LLD, ILD	T,C	T,C	T,C	с	с	с	T,C	T,C
NDP Med Concentrated Plus	ES	Soak <sup>1</sup>	N-Duopropenide, Alkylamine	HLD	T,C <sup>8</sup>	T,C <sup>8</sup>	N	Т	Т	т	T,C <sup>8</sup>	Т
neodisher endo CLEAN / neodisher endo SEPT PAC	DE	AR	Surfactant, Peracetic Acid	CL, HLD	N	N	N	N	Т	N	N	N
neodisher endo DIS active	DE	Soak <sup>1</sup>	Peracetic Acid	HLD	N	T,C <sup>8</sup>	N	Т	Т	т	T,C <sup>8</sup>	Т
neodisher Septo Active	DE	Soak <sup>1</sup>	Peracetic Acid	HLD	N	Т,С <sup>8</sup>	N	N	т	т	T,C <sup>8</sup>	т
Olympic Peracetic Acid	UK	AR	Peracetic Acid	HLD	N	Т,С <sup>8</sup>	N	N	т	N	T,C <sup>8</sup>	N
Omnicide 14NS	US	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	T,C <sup>8</sup>	N	Т	Т	т	T,C <sup>8</sup>	т

Solution/		Qualified Use	Active Ingredient	Disinfectant	Comp	atibilit	y Colur	nns				
System	Origin			Туре	1	2	3	4	5	6	7	8
Omnicide 28	US	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	т	т	T,C <sup>8</sup>	т
OPAL	AU	Soak <sup>1</sup>	Ortho- phthalaldehyde	HLD	Т,С <sup>8</sup>	T,C <sup>8</sup>	N	т	Т	т	T,C <sup>8</sup>	Т
Opti-Cide3	US	Spray/Wipe	Alcohol, QUAT	LLD, ILD	Т	т	т	н	Н	т,н	т	т
Oxivir (all types)	US	Wipe	Hydrogen Peroxide	LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	T,C,H	T,C	T,C
Oxygenon-I	DE	Soak <sup>1</sup>	Oxygen Generating	HLD	N	Т,С <sup>8</sup>	N	Τ 3	Т	т	T,C <sup>8</sup>	Т
PeraSafe	UK	Soak <sup>1</sup>	Peracetic Acid	HLD, S	Ν	T,C <sup>8</sup>	N	т	Т	т	т,С <sup>8</sup>	т
Perascope	UK	Soak <sup>1</sup>	Peracetic Acid	HLD	Ν	T,C <sup>8</sup>	N	N	Т	т	T,C <sup>8</sup>	т
Perastel	UK	AR/Soak <sup>1</sup>	Peracetic Acid	HLD	Ν	Т,С <sup>8</sup>	N	N	Т	т	Т,С <sup>8</sup>	т
PerCept (all types)	CA	Wipe	Hydrogen Peroxide	LLD, ILD	T,C	T,C	T,C	Т,С,Н	T,C,H	T,C,H	T,C	T,C
Phagocide D	FR	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	Т	т	T,C <sup>8</sup>	т
Phagozyme ND	FR	Pre-cleaner	Enzymes, QUAT	CL	T,C	T,C	N	т	Т	т	T,C	Т
Pl-Spray (Formerly T-Spray)	US	Spray/Wipe	QUAT	LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	Т,С,Н	T,C	T,C
Pl-Spray II (Formerly T-Spray II)	US	Spray/Wipe	QUAT	LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	Т,С,Н	T,C	T,C
PREempt Concentrate	CA	Spray/Wipe	Hydrogen Peroxide	LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	Т,С,Н	T,C	T,C

Solution/		Qualified Use	Active Ingredient	Disinfectant	Comp	atibilit	y Colur	nns				
System	Origin			Туре	1	2	3	4	5	6	7	8
PREempt RTU	CA	Spray/Wipe	Hydrogen Peroxide	LLD, ILD	T,C	T,C	T,C	Т,С,Н	T,C,H	T,C,H	T,C	T,C
PREempt Wipes	CA	Wipe	Hydrogen Peroxide	LLD, ILD	T,C	T,C	T,C	т,с,н	T,C,H	т,с,н	T,C	T,C
ProCide-D	US	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	Т,С <sup>8</sup>	N	т	Т	т	Т,С <sup>8</sup>	Т
ProCide-D Plus	US	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	т	т	T,C <sup>8</sup>	Т
Prolystica 2X	US	Pre-cleaner	Enzymes, Surfactant	CL	T,C	T,C	N	т,с,н	T,C,H	т	T,C	Т
Protex Disinfectant (All Types)	US	Spray/Wipe	QUAT	LLD, ILD	T,C	T,C	T,C	Т,С,Н	Т,С,Н	т,с,н	T,C	T,C
Proxy P/ Proxy A	AU	AR	Peracetic Acid	HLD	N	N	N	N	Т	N	N	N
Quaternary Ammonium (0.8% Active Max)	All	Spray/Wipe	QUAT	LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	T,C,H	T,C	T,C
RAPICIDE Glut	US	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	т	т	T,C <sup>8</sup>	Т
RAPICIDE OPA/28	US	Soak <sup>1</sup>	Ortho- phthalaldehyde	HLD	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	т	т	Т,С <sup>8</sup>	Т
RAPICIDE PA	US	Soak <sup>1</sup>	Peracetic Acid	HLD	N	T,C <sup>8</sup>	N	т	т	т	T,C <sup>8</sup>	N
RAPICIDE PA Single Shot	US	AR	Peracetic Acid	HLD	N	T,C <sup>8</sup>	N	т	Т	т	T,C <sup>8</sup>	N
Revital-Ox RESERT	US	Soak <sup>1</sup>	Hydrogen Peroxide	HLD	T,C <sup>8</sup>	T,C <sup>8</sup>	N	Τ 3	Т	т	N	т

Solution/	Country of	Qualified Use	Active Ingredient	Disinfectant	Comp	atibilit	y Colur	nns				
System	Origin			Туре	1	2	3	4	5	6	7	8
Rivascop	FR	Spray/Wipe	QUAT	LLD, ILD	T,C	T,C	T,C	т,с,н	T,C,H	T,C,H	T,C	T,C
Salvanios pH 10	FR	Spray/Wipe	QUAT	LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	т,с,н	T,C	T,C
Sani-Cloth Active	DE	Wipe	QUAT	LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	T,C,H	T,C	T,C
Sani-Cloth AF	US	Wipe	QUAT	LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	T,C,H	T,C	T,C
Sani-Cloth AF3	US	Wipe	QUAT	LLD, ILD	T,C	T,C	T,C	т,с,н	T,C,H	T,C,H	T,C	T,C
Sani-Cloth Bleach	US	Wipe	Sodium Hypochlorite	LLD, ILD	T,C	T,C	T,C	С	С	С	T,C	T,C
Sani-Cloth CHG 2%	UK	Spray/Wipe	Alcohol, Chlorhexidine gluconate	LLD, ILD	Т	Т	т	н	Η	Т,Н	Т	т
Sani-Cloth HB	US	Wipe	QUAT	LLD, ILD	T,C	T,C	T,C	т,с,н	T,C,H	T,C,H	T,C	T,C
Sani-Cloth Plus	US	Wipe	Alcohol, QUAT	LLD, ILD	т	т	т	н	Н	T,H	т	т
Sani-Cloth Prime	US	Wipe	Alcohol, QUAT	LLD, ILD	Т	т	т	н	н	т,н	т	Т
Sekucid N	FR	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	Т	т	T,C <sup>8</sup>	т
Sekusept Aktiv	DE	Soak <sup>1</sup>	Peracetic Acid	HLD	N	T,C <sup>8</sup>	N	т	Т	т	T,C <sup>8</sup>	Т
Sekusept Easy	DE	Soak <sup>1</sup>	Peracetic Acid	HLD	N	T,C <sup>8</sup>	N	т	т	т	T,C <sup>8</sup>	Т
Sekusept Plus	DE	Soak <sup>1</sup>	Glucoprotamine	HLD	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	Т	т	T,C <sup>8</sup>	Т
Serie TEE	FR	AR	Solution dependent	HLD	N	N	N	T	T <sup>7</sup>	N	N	N

Solution/		Qualified Use	Active Ingredient	Disinfectant	Comp	atibilit	y Colur	nns				
System	Origin			Туре	1	2	3	4	5	6	7	8
Soluscope P/ Soluscope A	FR	AR	Peracetic Acid	HLD	N	N	N	N	т	N	N	N
Steranios 2%	FR	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	т	т	T,C <sup>8</sup>	Т
STERRAD 100S	US	AR	Hydrogen Peroxide	S	N	N	N	N	N	т <sup>6</sup> ,С, Н	N	N
Super Sani-Cloth	US	Wipe	Alcohol, QUAT	LLD, ILD	Т	т	т	Н	Н	T,H	т	Т
TD-5	US	TD-100 Reprocessor, TEEClean Reprocessor	Glutaraldehyde	HLD	N	N	N	Т	Т	N	N	N
TD-8	US	TD-100 Reprocessor, TEEClean Reprocessor	Ortho- phthalaldehyde	HLD	N	N	N	Т	Т	N	N	N
TEEZyme	US	TEEClean Reprocessor	Enzymes, Surfactant	CL	N	N	N	T,C,H	T,C,H	N	N	N
TEEZyme Sponge	US	Pre-cleaner	Enzymes, Surfactant	CL	N	N	N	T,C,H	T,C,H	N	N	N
TEEZymeMC	US	Pre-cleaner	Enzymes, Surfactant	CL	T,C	T,C	N	T,C,H	T,C,H	т	T,C	Т
Tristel Duo	UK	Foam/Wipe	Chlorine Dioxide	HLD	T,C	T,C	N	N	N	N	T,C	T,C
Tristel Fuse for Stella	UK	Stella System	Chlorine Dioxide	HLD	T,C <sup>8</sup>	T,C <sup>8</sup>	N	Т	Т	т	т, С <sup>8</sup>	Т

Solution/		Qualified Use	Active Ingredient	Disinfectant	Comp	atibili	ty Colur	nns				
System	Origin			Туре	1	2	3	4	5	6	7	8
Tristel Multi- Shot	UK	Soak <sup>1</sup>	Chlorine Dioxide	HLD	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	Т	т	Т, С <sup>8</sup>	Т
Tristel Sporicidal Wipes	UK	Wipe	Chlorine Dioxide	HLD	T,C	T,C	T,C	T,C,H	T,C,H	т,с,н	T,C,H	T,C
Tristel Trio Wipes / Tristel Trio Trace	UK	Pre-clean wipe, Sporicidal wipe, Rinse wipe	Enzymes, Surfactant, Chlorine Dioxide	CL, HLD	T,C	T,C	T,C	T,C,H	T,C,H	т,с,н	T,C	т
trophon2	AU	trophon2 Reprocessor	Hydrogen Peroxide	HLD	T,C <sup>8</sup>	T,C <sup>8</sup>	N	N	N	N	T,C <sup>8</sup>	T,C
trophon Companion Cleaning Wipes	AU	Wipe	QUAT	LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	T,C,H	T,C	T,C
trophon EPR	AU	trophon EPR Reprocessor	Hydrogen Peroxide	HLD	T,C <sup>8</sup>	T,C <sup>8</sup>	N	N	N	N	T,C <sup>8</sup>	N
Vaposeptol	FR	Spray/Wipe	Alcohol, Biguanide	LLD, ILD	Т	т	т	н	Н	т,н	т	Т
Virox 5 RTU	СА	Wipe	Hydrogen Peroxide	LLD, ILD	T,C	T,C	T,C	Т,С,Н	T,C,H	T,C,H	T,C	T,C
Wavicide -01	US	Soak <sup>1</sup>	Glutaraldehyde	HLD, S	T,C <sup>8</sup>	T,C <sup>8</sup>	N	т	Т	т	T,C <sup>8</sup>	т
Wip'Anios Excel	FR	Wipe	QUAT, Biguanide, Surfactant	CL, LLD, ILD	T,C	T,C	T,C	Т,С,Н	T,C,H	Т,С,Н	T,C	T,C
Wip'Anios Premium	FR	Wipe	QUAT, Biguanide, Surfactant	CL, LLD, ILD	T,C	T,C	T,C	Т,С,Н	T,C,H	T,C,H	T,C	T,C

- 1. Never immerse or soak a connector. These products may be used in automated reprocessors (ARs) according to the procedures in the *Care and Cleaning of Ultrasound Systems and Transducers* document.
- 2. Antigermix S1 is not approved for 3D6-2, 3D8-4, V6-2, V8-4, V9-2, VL13-5, or VL13-5 Compact.
- 3. Oxygenon-I and Revital-Ox RESERT may produce a slight color change in the flexible shaft of the S7-3t and S8-3t transducers. This color change has no impact on device safety or performance.
- 4. Mild soap solutions do not contain any harsh ingredients and are not irritating to the skin. They must not contain fragrance, oils, or alcohols. Hand sanitizers are not approved for use.
- 5. Antigermix E1 may discolor the plastic parts of transesophageal transducers.
- 6. For the specific solutions used with this automated reprocessor, see "Guidelines for ARs (Automated Reprocessors)" on page 18.
- 7. For the specific solutions used with this automated reprocessor, see "Guidelines for Automated TEE Transducer Disinfectors and Cleaner Disinfectors" on page 20.
- 8. Approved only for cables; not approved for connectors.
- 9. For the specific solutions used with this automated reprocessor (transvaginal and transrectal transducers only), see "Guidelines for ARs (Automated Reprocessors)" on page 18.

www.philips.com/healthcare

## **...**

Philips Ultrasound, Inc. 22100 Bothell Everett Highway Bothell, WA 98021-8431 USA



Philips Medical Systems Nederland B.V. Veenpluis 4-6 5684 PC Best The Netherlands





© 2019 Koninklijke Philips N.V. All rights are reserved. Reproduction or transmission in whole or in part, in any form or by any means, electronic, mechanical or otherwise, is prohibited without the prior written consent of the copyright owner.

Published in USA 4535 620 14061\_A/795 \* JUL 2019 - en-US