

Disinfectants and Cleaning Solutions for Ultrasound Systems and Transducers

Contents

- 1 Read This First..... 5**
 - Warning Symbols..... 7
 - Customer Comments..... 7
 - Customer Service..... 8
 - User Information Conventions..... 8

- 2 Safety..... 11**
 - Warnings and Cautions..... 11
 - Glutaraldehyde Exposure..... 13

- 3 Disinfectants and Cleaning Solutions..... 15**
 - Disinfectants and Cleaners for System Surfaces..... 15
 - Automated Endoscope Reprocessor (AER) Guidelines for TEE Transducers..... 17
 - Disinfectants and Cleaning Solutions for Transducers..... 18
 - Disinfectant Compatibility by Transducer Name..... 19
 - Transducers Listed by Disinfectant Compatibility..... 24
 - Compatible Disinfectants and Cleaning Solutions..... 29

4535 618 90761_A/795 * MAR 2017

Philips Healthcare

1 Read This First

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.

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*, which contains 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 and the information contained in it is proprietary and confidential information of Philips Healthcare ("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 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 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.

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.

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*.

Warning Symbols

Symbol	Description
	Identifies a caution.
	Dangerous voltages: Appears adjacent to high-voltage terminals, indicating the presence of voltages greater than 1,000 Vac (600 Vac in the United States).
	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.
	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 the Philips Healthcare "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

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.

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. 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 the *Care and Cleaning of Ultrasound Systems and Transducers* manual or the "Transducer and System Care" website (www.philips.com/transducercare). For more information, see the disinfectant label instructions and the recommendations of the Association for Professionals in Infection Control, the U.S. Food and Drug Administration, 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**

On transducers with USB connectors, the only parts that may be cleaned with isopropyl alcohol are the transducer housing and lens (acoustic window). On non-TEE transducers, the only parts that may be cleaned with isopropyl alcohol are the connector housing and the transducer housing and lens. On TEE transducers, the only parts that may be cleaned with isopropyl alcohol are the connector housing and the control housing. Ensure that the solution is only 70% alcohol or less. Do not clean any other part of a transducer with isopropyl alcohol (including cables, USB connectors, or strain reliefs), as it can damage those parts of the transducer. This damage is not covered by the warranty or your service contract.

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, but this type of disinfectant is recommended for the disinfection of transducers used in TEE, intraoperative, endocavity, needle guidance, and biopsy procedures.

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

The compatibility of disinfection and cleaning solutions varies depending on the item on which they are used.

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 products in the following table are compatible with these system surfaces:

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

Cleaning Solutions for All Surfaces	Cleaning Solutions for Touch Screens and Monitor Screens	Disinfectants for System Surfaces and Touch Screens
Mild soap solution ¹	<ul style="list-style-type: none"> Mild soap solution¹ Cleaners designed for LCDs Purified water 	<ul style="list-style-type: none"> 70% isopropyl alcohol (IPA) Opti-Cide3 (QUAT/IPA based) Oxivir Tb (accelerated hydrogen peroxide based) PI-Spray II (QUAT based) Protex spray or wipes (compatible with EPIQ series, Affiniti series, and Xperius systems only) Sani-Cloth HB (QUAT based) Sani-Cloth Plus (QUAT/IPA based)

- 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**

On display screens, do not use glass cleaners or products containing bleach. Immediately wipe away disinfectants or cleaners to prevent residue buildup.



CAUTION

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



CAUTION

On display screens, use microfiber cloth; do not use paper towels.



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

Automated Endoscope Reprocessor (AER) Guidelines for TEE Transducers

You can reprocess Philips TEE transducers in an AER, if the following criteria are met:

- All chemicals used must be compatible with the specific Philips TEE transducer model being reprocessed, and they must be used under the conditions recommended by the AER 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 during AER use is prohibited.
- Heated drying methods may not be used.

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

Examples: AERs Compatible with Philips TEE Transducers

Manufacturer	Model	Country of Origin	Compatible Disinfectant	Processing Temperature
CS Medical	TD-100	US	TD-5	37°C (98.6°F)
Medivators	Advantage Plus Endoscope Reprocessing System	US	Rapicide PA	30°C (86°F)
CIVCO Medical Solutions	Astra TEE	US	MetriCide OPA Plus	40°C (104°F)
Soluscope	Serie TEE	FR	Soluscope P	40°C (104°F)

For instructions on cleaning and disinfecting TEE transducers with AERs, see *Care and Cleaning of Ultrasound Systems and Transducers* or the "Transducer and System Care" website:

www.philips.com/transducercare

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 19](#): 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 29](#).
- [“Transducers Listed by Disinfectant Compatibility” on page 24](#): Organizes the transducers by the corresponding Compatibility column of [“Compatible Disinfectants and Cleaning Solutions” on page 29](#). Use this table to quickly understand which transducers correspond to the numbered Compatibility columns.
- [“Compatible Disinfectants and Cleaning Solutions” on page 29](#): 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 29](#). 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*.

Compatibility References by Transducer Name

Transducer Name (System Name)	Compatibility Column
1.9MHz CW Pencil	3
1.9MHz TCD	3
3D6-2	1
3D8-4	1

Transducer Name (System Name)	Compatibility Column
3D9-3v (HD11, HD15, iU22)	1
3D9-3v (Affiniti, ClearVue, EPIQ)	2
5.0MHz CW Pencil	3
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 [†]
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

Transducer Name (System Name)	Compatibility Column
C9-4v	2
C9-4v Compact	2
C9-5ec	1
C10-3v	2
C10-4ec	2
D2cwc	3
D2tcd	3
D5cwc	3
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
L12-4 (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)	1
L12-5 50 mm Compact (Affiniti, EPIQ)	2
L12-5 50 mm	1

Transducer Name (System Name)	Compatibility Column
L15-7io (HD11, HD15, iE33, iU22)	1 or 2 †
L15-7io (Affiniti, CX30, CX50, EPIQ, Sparq)	2
L17-5	1
L18-5	2
OMNI III TEE	5
S3-1	1
S4-1 (iU22)	1
S4-1 (ClearVue)	2
S4-1 (Lumify)	8
S4-2	1
S4-2 Compact (CX30, Sparq)	1
S4-2 Compact (Affiniti)	2
S5-1 (CX50, iE33, iU22)	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
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
V8-4	1
VL13-5	1
VL13-5 Compact	2
X3-1	1
X5-1 (iE33)	1
X5-1 (EPIQ)	2
X6-1	2
X7-2 (iE33, iU22)	1
X7-2 (EPIQ)	2
X7-2t	5
X8-2t	5
X8-2ti	5

Footnotes

† Use Compatibility Column 2 for C8-4v models with the following part numbers:

- Part number 4535611 7292x, where x is 3 or greater
- Part number 4535612 8750x, where x is 2 or greater
- Part number 4535613 1895x, where x is 1 or greater
- Part number 4535614 9748x, where x is 1 or greater
- Part number 4535614 9749x, where x is 1 or greater
- Part number 4535616 8452x 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.

‡ Use Compatibility Column 2 for L15-7io models with the following part numbers:

- Part number 4535614 0781x, where x is 1 or greater
- Part number 4535612 8750x, where x is 2 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.

Transducers Listed by Disinfectant Compatibility

This table organizes the transducers by the corresponding Compatibility column of “[Compatible Disinfectants and Cleaning Solutions](#)” on page 29. 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*.

Transducers Listed by Disinfectant Compatibility

Transducers (System Names) Covered by Compatibility Column 1	
3D6-2	L12-5 50 mm
3D8-4	L15-7io (HD11, HD15, iE33, iU22) ²
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, Sparq)
C6-3	S5-1 (CX50, iE33, iU22)
C8-4v ¹	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)	X7-2 (iE33, iU22)

Transducers (System Names) Covered by Compatibility Column 2

3D9-3v (Affiniti, ClearVue, EPIQ)	L12-4 Compact (Affiniti)
BP10-5ec	L12-5 50 mm Compact (Affiniti, EPIQ)
C5-1 (Affiniti, EPIQ, Sparq)	L15-7io (Affiniti, CX30, CX50, EPIQ, Sparq)
C5-2 (ClearVue)	L15-7io (HD11, HD15, iE33, iU22) ²
C6-2 Compact (Affiniti)	L18-5
C8-4v ¹	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	S12-4 Compact (Affiniti, EPIQ)
C9-4v Compact	V6-2 (Affiniti, ClearVue, EPIQ, HD5)
C10-3v	X5-1 (EPIQ)
C10-4ec	X6-1
L12-3 (Affiniti, CX50, EPIQ)	X7-2 (EPIQ)
L12-4 (ClearVue)	

Transducers Covered by Compatibility Column 3

1.9MHz CW Pencil

1.9MHz TCD

5.0MHz CW Pencil

D2cwc

D2tcd

D5cwc

TCD

Transducers Covered by Compatibility Column 4

S7-3t

S8-3t

Transducers Covered by Compatibility Column 5

OMNI III TEE

S6-2mpt

S7-2t

X7-2t

X8-2t

X8-2ti

Transducers 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 4535611 7292x, where x is 3 or greater
- Part number 4535612 8750x, where x is 2 or greater
- Part number 4535613 1895x, where x is 1 or greater
- Part number 4535614 9748x, where x is 1 or greater
- Part number 4535614 9749x, where x is 1 or greater
- Part number 4535616 8452x 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 4535614 0781x, where x is 1 or greater
- Part number 4535612 8750x, where x is 2 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 24](#) or [“Disinfectant Compatibility by Transducer Name” on page 19](#) to find your transducer and its corresponding Compatibility column.



CAUTION

On transducers with USB connectors, the only parts that may be cleaned with isopropyl alcohol are the transducer housing and lens (acoustic window). On non-TEE transducers, the only parts that may be cleaned with isopropyl alcohol are the connector housing and the transducer housing and lens. On TEE transducers, the only parts that may be cleaned with isopropyl alcohol are the connector housing and the control housing. Ensure that the solution is only 70% alcohol or less. Do not clean any other part of a transducer with isopropyl alcohol (including cables, USB connectors, or strain reliefs), as 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 approved for use the following types of *low-level* disinfectants used as a spray or wipe for surface (skin contact) and transvaginal or transrectal probes, according to the compatibility restrictions in the disinfectants table:

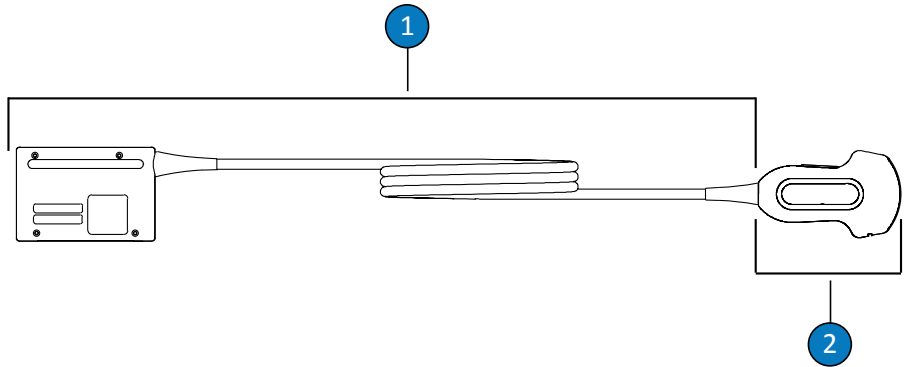
- Sodium-hypochlorite based (for example 10% household bleach solution with active sodium hypochlorite at approximately 0.6%)
- Quaternary-ammonium (QUAT) based (for example, products that contain n-alkyl xbenzyl ammonium chloride solution where x can be any organic functional group such as ethyl and 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 70%)

- 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 more information.

Disinfectants and Cleaning Solutions Table Legend

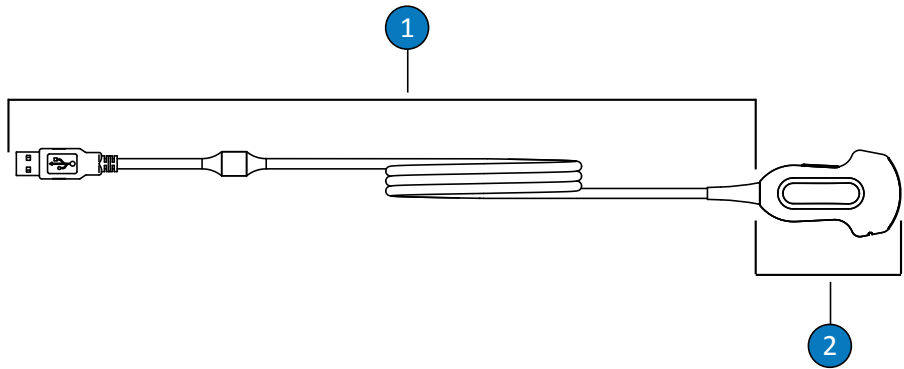
Country of Origin	Disinfectant Type	Compatibility
AU = Australia	CL = Cleaner	C = Approved for use on the cable and connector (never immerse or soak a connector)
CA = Canada	HLD = High-level disinfectant	
DE = Germany	ILD = Intermediate-level disinfectant	H = Approved for use on the handle and steering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



Non-TEE Transducer Parts

-
- 1 C (Cable and connector)

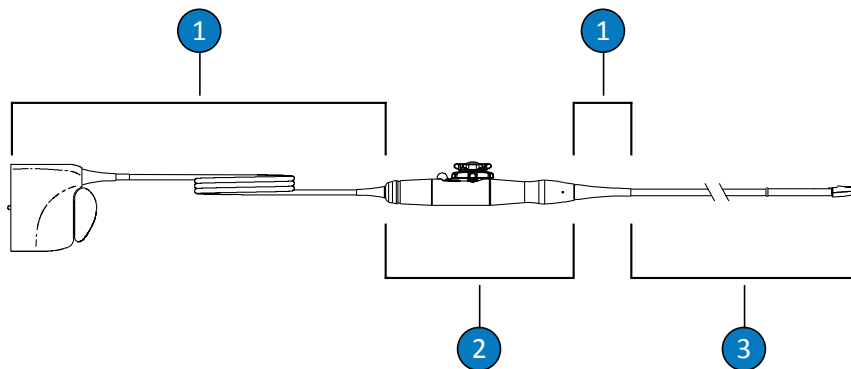
 - 2 T (Transducer)



Non-TEE Transducers (USB Connection)

-
- 1 C (Cable and connector)

 - 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 24](#) or [“Disinfectant Compatibility by Transducer Name” on page 19](#) to find your transducer and its corresponding Compatibility Column.

Disinfectants and Cleaning Solutions Compatibility

Solution	Country of Origin	Qualified Use	Active Ingredient	Disinfectant Type	Compatibility Columns							
					1	2	3	4	5	6	7	8
70% Isopropyl Alcohol	All	Spray/Wipe	Alcohol	LLD, ILD	T	T	T	H	H	T,H	T	T
AbcoCide	US	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
AbcoCide 28	US	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
Accel Wipes (all types)	CA	Wipe	Hydrogen Peroxide	LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	T,C,H	T,C	T,C
Acecide	JP	Soak ¹	Peracetic Acid	HLD, S	N	N	N	N	T	N	N	N
Aidal Plus	AU	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
Alkaspray	FR	Spray/Wipe	Alcohol, Alkylamine	LLD, ILD	T	T	T	H	H	T,H	T	T
Ampholysine Basique	FR	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
Anios Clean Excel D	FR	Spray/Wipe/ Soak ¹	QUAT, Chlorhexidine gluconate, Surfactant	CL	T,C	T,C	T,C	T	T	T	T,C	T,C
Aniosept Activ	FR	Soak ¹	Peracetic Acid	HLD, S	N	T,C	N	N	T	T	T,C	T
ANIOXY DM	FR	Soak ¹	Peracetic Acid	HLD, S	N	T,C	N	N	T	T	T,C	T
Anioxyde 1000	FR	Soak ¹	Peracetic Acid	HLD	N	T,C	N	N	T	T	T,C	T
Antigermix E1	FR	E1 System	UV-C	HLD	N	N	N	N	T,C,H	N	N	N
Antigermix S1	FR	S1 System	UV-C	HLD	T,C ²	T,C ²	N	N	N	N	T,C	T,C

4535 618 90761_A/795 * MAR 2017

Philips Healthcare

Solution	Country of Origin	Qualified Use	Active Ingredient	Disinfectant Type	Compatibility Columns							
					1	2	3	4	5	6	7	8
Bacillol 30 Foam	DE	Spray/Wipe	Alcohol, Alkylamine	LLD, ILD	T	T	T	H	H	T,H	T	T
Banicide Plus	US	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
Bleach (0.6% NaOCl Max)	All	Spray/Wipe	Sodium Hypochlorite	LLD, ILD	T,C	T,C	T,C	C	C	C	T,C	T,C
CaviWipes	US	Wipe	Alcohol, QUAT	LLD, ILD	T	T	T	H	H	T,H	T	T
Cidex	US	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
Cidex 7	US	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
Cidex OPA	US	Soak ¹	Ortho-phthalaldehyde	HLD	T,C	T,C	N	T	T	T	T,C	T
Cidex PAE 14J	FR	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
Cidex Plus	US	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
Cleanisept Wipes	DE	Spray/Wipe	QUAT	LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	T,C,H	T,C	T,C
Clinell Sporicidal Wipes	UK	Wipe	Peracetic Acid, Surfactant	CL, HLD	T,C	T,C	T,C	N	T,C	T,C,H	T,C	T,C
Clinell Universal Sanitising Wipes	UK	Spray/Wipe	QUAT, Biguanide	LLD, ILD	T,C	T,C	T,C	T	T	T	T,C	T,C

4535 618 90761_A/795 * MAR 2017

Philips Healthcare

Solution	Country of Origin	Qualified Use	Active Ingredient	Disinfectant Type	Compatibility Columns							
					1	2	3	4	5	6	7	8
Clorox Healthcare Bleach Germicidal Cleaner	US	Spray/Wipe	Sodium Hypochlorite	LLD, ILD	T,C	T,C	T,C	C	C	C	T,C	T,C
Clorox Healthcare Hydrogen Peroxide Cleaner Disinfectants	US	Spray/Wipe	Hydrogen Peroxide	LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	T,C,H	T,C	T,C
Combi-Instruments-N	DE	Soak ¹	Glutaraldehyde & formacetales blend	HLD	T,C	T,C	N	N	T	T	T,C	T
Descoton Extra	DE	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
Dispatch	US	Spray/Wipe	Sodium Hypochlorite	LLD, ILD	T,C	T,C	T,C	C	C	C	T,C	T,C
Endosporine	FR	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
Enzol	US	Pre-cleaner	Enzymes, Surfactant	CL	T,C	T,C	N	T	T,C,H	T,C,H	T,C	T
Epizyme Rapid	AU	Pre-cleaner	Enzymes, Surfactant	CL	T,C	T,C	N	T	T,C,H	T,C,H	T,C	T
Gigasept FF (neu)	DE	Soak ¹	Succinic dialdehyde	HLD	T,C	T,C	N	T	T	N	T,C	T
Gigasept PA	DE	Soak ¹	Peracetic Acid	HLD	N	T,C	N	N	T	T	T,C	T

4535 618 90761_A/795 * MAR 2017

Philips Healthcare

Solution	Country of Origin	Qualified Use	Active Ingredient	Disinfectant Type	Compatibility Columns							
					1	2	3	4	5	6	7	8
Gigasept PAA Concentrate	DE	Soak ¹	Peracetic Acid	HLD	N	T,C	N	N	T	T	T,C	T
Hibiclens (4% Max)	US	Pre-cleaner	Chlorhexidine gluconate	CL	T,C	T,C	T	T,C	T,C	T,C	T,C	T,C
Incidin	DE	Spray/Wipe	Alcohol	LLD, ILD	T	T	T	H	H	T,H	T	T
Incidin OxyWipe	DE	Spray/Wipe	Hydrogen Peroxide, Surfactant	CL, LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	T,C,H	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	T,C,H	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	T,C,H	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	T,C,H	T,C	T,C
Incidin Rapid	DE	Spray/Wipe	QUAT, Glutaraldehyde	LLD, ILD	T,C	T,C	T,C	T	T	T	T,C	T,C
Incidur Spray	DE	Spray/Wipe	Alcohol, QUAT, Aldehyde	LLD, ILD	T	T	T	H	H	T,H	T	T
Instruzyme	FR	Pre-cleaner	Enzymes, QUAT, Biguanide	CL	T,C	T,C	N	T	T	T	T,C	T
Klenzyme	US	Pre-cleaner	Enzymes, Surfactant	CL	T,C	T,C	N	T,C,H	T,C,H	T	T,C	T

Solution	Country of Origin	Qualified Use	Active Ingredient	Disinfectant Type	Compatibility Columns							
					1	2	3	4	5	6	7	8
Korsolex Basic	FR	Soak ¹	Aldehyde Releasing	HLD	T,C	T,C	N	T	T	T	T	T
Korsolex Extra	FR	Soak ¹	QUAT, Aldehyde	HLD	T,C	T,C	N	T	T	T	T,C	T
Korsolex PAE	FR	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
Matrix Biofilm Remover	AU	Pre-cleaner	Enzymes, Surfactant	CL	T,C	T,C	T	T,C,H	T,C,H	T	T,C	T
MaxiCide Plus	US	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
MedDis	UK	Soak ¹	QUAT, Sulfamic Acid	HLD	T,C	T,C	N	T	T	T	T,C	T
Medistel	UK	Soak ¹	QUAT, Sulfamic Acid	HLD	T,C	T,C	N	T	T	T	T,C	T
Medizyme	AU	Pre-cleaner	Enzymes, Surfactant	CL	T,C	T,C	N	T,C,H	T,C,H	T	T,C	T
MetriCide	US	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
MetriCide 28	US	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
MetriCide OPA Plus	US	Soak ¹	Ortho-phthalaldehyde	HLD	T,C	T,C	N	T	T	T	T,C	T
MetriCide Plus 30	US	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
MetriZyme	US	Pre-cleaner	Enzymes, Surfactant	CL	T,C	T,C	N	T,C,H	T,C,H	T	T,C	T
mikrozid PAA wipes	DE	Wipe	Peracetic Acid	LLD, ILD	N	T,C	T,C	N	T,C	T,C,H	T,C	T,C

Solution	Country of Origin	Qualified Use	Active Ingredient	Disinfectant Type	Compatibility Columns							
					1	2	3	4	5	6	7	8
Mild Soap Solution ⁴	All	Pre-cleaner	Surfactant	CL	T,C	T,C	T,C	T,C,H	T,C,H	T	T,C	T
Milton	AU	Spray/Wipe	Sodium Hypochlorite	LLD, ILD	T,C	T,C	T,C	C	C	C	T,C	T,C
NDP Med Concentrated Plus	ES	Soak ¹	N-Duopropenide, Alkylamine	HLD	T,C	T,C	N	T	T	T	T,C	T
neodisher endo CLEAN / neodisher endo SEPT PAC	DE	AER	Surfactant, Peracetic Acid	CL, HLD	N	N	N	N	T	N	N	N
neodisher endo DIS active	DE	Soak ¹	Peracetic Acid	HLD	N	T,C	N	T	T	T	T,C	T
Olympic Peracetic Acid	UK	AER	Peracetic Acid	HLD	N	N	N	N	T	T	T,C	T
Omnicide 14NS	US	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
Omnicide 28	US	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
OPAL	AU	Soak ¹	Ortho-phthalaldehyde	HLD	T,C	T,C	N	T	T	T	T,C	T
Opti-Cide3	US	Spray/Wipe	Alcohol, QUAT	LLD, ILD	T	T	T	H	H	T,H	T	T
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

4535 618 90761_A/795 * MAR 2017

Philips Healthcare

Solution	Country of Origin	Qualified Use	Active Ingredient	Disinfectant Type	Compatibility Columns							
					1	2	3	4	5	6	7	8
Oxygenon-I	DE	Soak ¹	Oxygen Generating	HLD	N	T,C	N	T ³	T	T	T,C	T
PeraSafe	UK	Soak ¹	Peracetic Acid	HLD, S	N	T,C	N	T	T	T	T,C	T
Perascope	UK	Soak ¹	Peracetic Acid	HLD	N	T,C	N	N	T	T	T,C	T
Perastel	UK	AER / Soak ¹	Peracetic Acid	HLD	N	T,C	N	N	T	T	T,C	T
PerCept (all types)	CA	Wipe	Hydrogen Peroxide	LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	T,C,H	T,C	T,C
Phagocide D	FR	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
Phagozyme ND	FR	Pre-cleaner	Enzymes, QUAT	CL	T,C	T,C	N	T	T	T	T,C	T
PI-Spray (Formerly T-Spray)	US	Spray/Wipe	QUAT	LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	T,C,H	T,C	T,C
PI-Spray II (Formerly T-Spray II)	US	Spray/Wipe	QUAT	LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	T,C,H	T,C	T,C
ProCide-D	US	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
ProCide-D Plus	US	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
Prolystica 2X	US	Pre-cleaner	Enzymes, Surfactant	CL	T,C	T,C	N	T,C,H	T,C,H	T	T,C	T
Protex Disinfectant (All Types)	US	Spray/Wipe	QUAT	LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	T,C,H	T,C	T,C

4535 618 90761_A/795 * MAR 2017

Philips Healthcare

Solution	Country of Origin	Qualified Use	Active Ingredient	Disinfectant Type	Compatibility Columns							
					1	2	3	4	5	6	7	8
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	US	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
Rapicide OPA	US	Soak ¹	Ortho-phthalaldehyde	HLD	T,C	T,C	N	T	T	T	T,C	T
Rapicide PA	US	Soak ¹	Peracetic Acid	HLD	N	T,C	N	T	T	T	T,C	N
Revital-Ox Resert XL HLD	US	Soak ¹	Hydrogen Peroxide	HLD	T,C	T,C	N	T ³	T	T	N	T
Rivascop	FR	Spray/Wipe	QUAT	LLD, ILD	T,C	T,C	T,C	T,C,H	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	T,C,H	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	T,C,H	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	C	C	C	T,C	T,C
Sani-Cloth CHG 2%	UK	Spray/Wipe	Alcohol, Chlorhexidine gluconate	LLD, ILD	T	T	T	H	H	T,H	T	T
Sani-Cloth HB	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 Plus	US	Wipe	Alcohol, QUAT	LLD, ILD	T	T	T	H	H	T,H	T	T

4535 618 90761_A/795 * MAR 2017

Philips Healthcare

Solution	Country of Origin	Qualified Use	Active Ingredient	Disinfectant Type	Compatibility Columns							
					1	2	3	4	5	6	7	8
Sekucid N	FR	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
Sekusept Aktiv	DE	Soak ¹	Peracetic Acid	HLD	N	T,C	N	T	T	T	T,C	T
Sekusept Easy	DE	Soak ¹	Peracetic Acid	HLD	N	T,C	N	T	T	T	T,C	T
Sekusept Plus	DE	Soak ¹	Glucoprotamine	HLD	T,C	T,C	N	T	T	T	T,C	T
Soluscope P	FR	AER	Peracetic Acid	HLD	N	N	N	N	T	N	N	N
Steranios 2%	FR	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
Sterrad 100S	US	Reprocessor (S)	Hydrogen Peroxide	S	N	N	N	N	N	T,C,H	T,C	N
Super Sani-Cloth	US	Wipe	Alcohol, QUAT	LLD, ILD	T	T	T	H	H	T,H	T	T
TD-5	US	TD-100 Reprocessor	Glutaraldehyde	HLD	N	N	N	T	T	N	N	N
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	T,C	N	T	T	T	T	T
Tristel Multi-Shot	UK	Soak ¹	Chlorine Dioxide	HLD	T,C	T,C	N	T	T	T	T	T
Tristel Sporicidal Wipes	UK	Wipe	Chlorine Dioxide	HLD	T,C	T,C	T,C	T,C,H	T,C,H	T,C,H	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	T,C,H	T,C	T

4535 618 90761_A/795 * MAR 2017

Philips Healthcare

Solution	Country of Origin	Qualified Use	Active Ingredient	Disinfectant Type	Compatibility Columns							
					1	2	3	4	5	6	7	8
Trophon EPR	AU	Trophon EPR Reprocessor	Hydrogen Peroxide	HLD	T,C	T,C	N	N	N	N	T,C	N
Vaposeptol	FR	Spray/Wipe	Alcohol, Biguanide	LLD, ILD	T	T	T	H	H	T,H	T	T
Virox 5 RTU	CA	Wipe	Hydrogen Peroxide	LLD, ILD	T,C	T,C	T,C	T,C,H	T,C,H	T,C,H	T,C	T,C
Wavicide -01	US	Soak ¹	Glutaraldehyde	HLD, S	T,C	T,C	N	T	T	T	T,C	T
Wip'Anios	FR	Wipe	Alcohol, QUAT	LLD, ILD	T	T	T	H	H	T,H	T	T

1. Never immerse or soak a connector. These products may be used in automated endoscope reprocessors (AERs) 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, VL13-5, or VL13-5 Compact.
3. Oxygenon-I and Revital-Ox Resert XL HLD 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.

Philips Healthcare is part of Royal Philips

www.philips.com/healthcare
healthcare@philips.com



Manufacturer's address

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



© 2017 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 618 90761_A/795 * MAR 2017 - en-US