

# **TEE Transducers Disinfectants and Cleaning Solutions**

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# **1** About This Document

This document lists the disinfectants and cleaning solutions approved for use with your Philips transesophageal echocardiographic (TEE) transducer.

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 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

# 2 Disinfectants and Cleaning Solutions For TEE Transducers

The following table lists the disinfectants and cleaning solutions compatible with the transducers available for your Philips ultrasound system.



# CAUTION

On TEE transducers, the only parts that may be cleaned with isopropyl alcohol are the connector housing and the handle. Ensure that the solution is only 70% alcohol or less. Do not wipe any other part of a transducer with isopropyl alcohol (including cables and 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 disinfectants for TEE transducers, according to the compatibility restrictions in the table:

- Quaternary ammonium (QUAT) based (for example, products that contain n-alkyl (x)benzyl 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%)
- You may also use products not specifically listed in the compatibility table but with similar active ingredients, as indicated above, and marketed for medical use



# CAUTION

Use only liquid solutions to sterilize transducers. Using autoclave, gas (EtO), or other methods not approved by Philips will damage your transducer and void your warranty.



#### 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

Do not bend the shaft into a circle with a diameter of less than 0.30 m (1 ft).



# CAUTION

Do not allow sharp objects, such as scalpels and cauterizing knives, to touch transducers or cables.



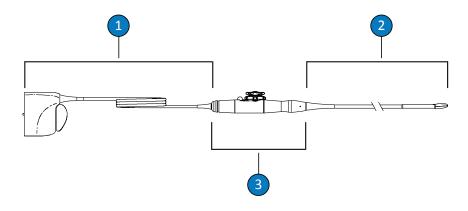
### CAUTION

When handling a transducer, do not bump the transducer on hard surfaces.

The level of disinfection required for a device is dictated by the type of tissue it will contact during use. Ensure the disinfectant type is appropriate for the type of transducer and the transducer application. For TEE probes, pre-cleaning followed by high-level disinfection or sterilization is recommended.

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

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



The following illustrates transducer sections for compatibility purposes:

#### TEE Transducers

- 1 C (Cable and connector)
- 2 T (Transducer)
- 3 H (Handle and steering mechanism)

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

Solution	Origin	Qualified Use	Active Ingredients	S7-2 omni T6H X7-2t	S7-3t S8-3t T6207
70% Isopropyl Alcohol	All	Spray, Wipe (LLD,ILD)	Alcohol	Н	Н
AbcoCide	US	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
AbcoCide 28	US	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
Accel Wipes (all types)	CA	Wipe (LLD,ILD)	Hydrogen Peroxide	Т,С,Н	Т,С,Н
Acecide	JP	Soak <sup>1</sup> (HLD,S)	Peracetic Acid	Т	N
Aidal Plus	AU	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
Alkaspray	FR	Spray, Wipe (LLD,ILD)	Alcohol, Alkylamine	Н	Н
Ampholysine Basique	FR	Spray, Wipe (LLD,ILD)	Biguanide, Quat. Ammonia	Т,С,Н	T,C,H
Aniosept Activ	FR	Soak <sup>1</sup> (HLD,S)	Peracetic	Т	N

#### Disinfectants and Cleaning Solutions For TEE Transducers

Solution	Origin	Qualified Use	Active Ingredients	S7-2 omni T6H X7-2t	S7-3t S8-3t T6207
ANIOXY DM	FR	Soak <sup>1</sup> (HLD,S)	Peracetic Acid	Т	Ν
Anioxyde 1000	FR	Soak <sup>1</sup> (HLD)	Peracetic	Т	Ν
Antigermix S1	FR	S1 System (HLD)	UV-C	Ν	Ν
Banicide Plus	US	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
Bleach (0.6% solution NaOCl Max)	All	Spray, Wipe (LLD,ILD)	Sodium Hypochlorite	С	С
CaviWipes	US	Wipe (LLD,ILD)	Alcohol, Quat. Ammonia	Н	Н
Cidex	US	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
Cidex 7	US	Soak <sup>1</sup> (HLD, S)	Glutaraldehyde	Т	Т
Cidex OPA	US	Soak <sup>1</sup> (HLD)	Ortho-phthalaldehyde	Т	Т
Cidex PAE 14J	FR	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
Cidex Plus	US	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
Cleanisept Wipes/forte	DE	Wipe (LLD,ILD)	Quat. Ammonia	T,C,H	т,с,н
Clorox Healthcare Bleach	US	Spray, Wipe	Sodium Hypochlorite	С	С
Germicidal Cleaner		(LLD,ILD)			
Clorox Healthcare Hydrogen	US	Spray, Wipe	Hydrogen Peroxide	т,с,н	T,C,H
Peroxide Cleaner		(LLD,ILD)			
Disinfectant					
Combi-Instruments-N	FR	Soak <sup>1</sup> (HLD)	Glutaraldehyde, formacetale	Т	Ν
Descoton Extra	DE	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
Dispatch	US	Spray, Wipe (LLD,ILD)	Sodium Hypochlorite	С	С
Endosporine	FR	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
Enzol	US	Pre-cleaner (CL)	Enzymes	Т	Т
Epizyme Rapid	AU	Pre-cleaner (CL)	Enzymes	Т	Т
Gigasept FF (neu)	DE	Soak <sup>1</sup> (HLD)	Succinic dialdehyde	Т	Т
Gigasept PA	DE	Soak <sup>1</sup> (HLD)	Peracetic	Т	N
Gigasept PAA Concentrate	DE	Soak <sup>1</sup> (HLD)	Peracetic	Т	N
Incidin	DE	Spray, Wipe (LLD,ILD)	Alcohol	Η	Η

Solution	Origin	Qualified Use	Active Ingredients	S7-2 omni T6H X7-2t	S7-3t S8-3t T6207
Incidur Spray	DE	Spray, Wipe (LLD,ILD)	Alcohol Quat, Aldehyde	Н	Н
Instruzyme	FR	Pre-cleaner (CL)	Enzymes, Quat. Ammonia, Biguanide	Т	Т
Klenzyme	US	Pre-cleaner (CL)	Enzymes	Т	Т
Korsolex Basic	FR	Soak <sup>1</sup> (HLD)	Aldehyde Releasing	т	Т
Korsolex Extra	FR	Soak <sup>1</sup> (HLD)	Aldehydes, Quaternary Ammonium	Т	Т
Korsolex PAE	FR	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
MaxiCide Plus	US	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
MedDis	UK	Soak <sup>1</sup> (HLD)	Quat. Ammonia, Sulfamic Acid	Т	Т
Medistel	UK	Soak <sup>1</sup> (HLD)	Quat. Ammonia, Sulfamic Acid	Т	Т
Medizyme	AS	Soak <sup>1</sup> (CL)	Enzymes	Т	Т
MetriCide	US	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
MetriCide 28	US	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
MetriCide OPA Plus	US	Soak <sup>1</sup> (HLD)	Ortho-phthalaldehyde	Т	Т
MetriCide Plus 30	US	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
MetriZyme	US	Pre-cleaner (CL)	Enzymes	Т	Т
mikrozid PAA Wipes	DE	Wipe (LLD,ILD)	Peracetic	T,C	Ν
Mild Soap Solution	All	Pre-cleaner (CL)	Surfactants, Soap	T,C	T,C
Milton	AU	Spray, Wipe (LLD,ILD)	Sodium Hypochlorite	С	С
NDP Med Concentrated Plus	ES	Soak <sup>1</sup> (HLD)	N-Duopropenide, Alkylamine	Т	Т
neodisher endo CLEAN/ neodisher endo SEPT PAC	DE	AER (HLD)	Cleaner, Peracetic	Т	Ν
Neodisher endo DIS active	DE	Soak <sup>1</sup> (HLD)	Peracetic Acid	Т	Т
Olympic Peracetic Acid	UK	AER (HLD)	Peracetic	Т	Ν
Omnicide 14NS	US	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т

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Solution	Origin	Qualified Use	Active Ingredients	S7-2 omni T6H X7-2t	S7-3t S8-3t T6207
Omnicide 28	US	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
OPAL	AU	Soak <sup>1</sup> (HLD)	Ortho-phthalaldehyde	Т	Т
Opticide3	US	Spray, Wipe (LLD,ILD)	Alcohol, Quat. Ammonia	Н	Н
Oxivir (all types)	US	Wipe (LLD,ILD)	Hydrogen Peroxide	T,C,H	T,C,H
Oxygenon-I	FR	Soak <sup>1</sup> (HLD)	Oxygen generating	Т	Ν
PeraSafe	UK	Soak <sup>1</sup> (HLD,S)	Peracetic	Т	Т
Perascope	UK	Soak <sup>1</sup> (HLD)	Peracetic	Т	N
Perastel	UK	AER, Soak <sup>1</sup> (HLD)	Peracetic	Т	N
PerCept (all types)	CA	Wipe (LLD,ILD)	Hydrogen Peroxide	Т,С,Н	T,C,H
Phagocide D	FR	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
Phagozyme ND	FR	Pre-cleaner (CL)	Enzymes, Quaternary Ammonium	т	Т
PI-Spray (formerly T-Spray)	US	Spray, Wipe (LLD,ILD)	Quat. Ammonia	T,C,H	T,C,H
PI-Spray II (formerly T-Spray II)	US	Spray, Wipe (LLD,ILD)	Quat. Ammonia	Т,С,Н	T,C,H
Pro-Cide D	US	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
Pro-Cide D Plus	US	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
Prolystica 2X	US	Pre-cleaner (CL)	Enzymes	Т	Т
Protex Disinfectant Spray	US	Spray, Wipe (LLD,ILD)	Quat. Ammonia	Т,С,Н	T,C,H
Quaternary Ammonium (0.8% Active Max)	All	Spray, Wipe (LLD,ILD)	Quat. Ammonia	Т,С,Н	T,C,H
Rapicide	US	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
Rapicide OPA	US	Soak <sup>1</sup> (HLD)	Ortho-phthalaldehyde	Т	Т
Rapicide PA	US	Soak <sup>1</sup> (HLD)	Peracetic Acid	Т	N
Revital-Ox Resert XL HLD	US	Soak <sup>1</sup> (HLD)	Hydrogen Peroxide	Т	N
Rivascop	FR	Spray, Wipe (LLD,ILD)	Quat. Ammonia	Т,С,Н	T,C,H

Solution	Origin	Qualified Use	Active Ingredients	S7-2 omni	S7-3t
				т6н	S8-3t
				X7-2t	T6207
Salvanios pH 10	FR	Spray, Wipe	Quat. Ammonia	T,C,H	T,C,H
		(LLD,ILD)			
Sani-Cloth Active	DE	Wipe (LLD,ILD)	Quat. Ammonia	T,C,H	T,C,H
Sani-Cloth AF	US	Wipe (LLD,ILD)	Quat. Ammonia	T,C,H	T,C,H
Sani-Cloth AF3	US	Wipe (LLD,ILD)	Quat. Ammonia	T,C,H	T,C,H
Sani-Cloth HB	US	Wipe (LLD,ILD)	Quat. Ammonia	T,C,H	T,C,H
Sani-Cloth Bleach	US	Wipe (LLD,ILD)	Sodium Hypochlorite	С	С
Sani-Cloth Plus	US	Wipe (LLD,ILD)	Alcohol, Quat. Ammonia	Н	Н
Sekucid N	FR	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
Sekusept Aktiv	DE	Soak <sup>1</sup> (HLD)	Peracetic	Т	Т
Sekusept Easy	DE	Soak <sup>1</sup> (HLD)	Peracetic	Т	Т
Sekusept Plus	DE	Soak <sup>1</sup> (HLD)	Glucoprotamine	Т	Т
Soluscope P	FR	AER (HLD)	Peracetic	Т	N
Steranios 2%	FR	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
TD-5	US	TD-100 Reprocessor	Glutaraldehyde	Т	Т
		(HLD,S)			
Tristel Duo	UK	Foam, Wipe (HLD)	Chlorine Dioxide	Ν	Ν
Tristel Fuse for Instruments	UK	Stella System (HLD)	Chlorine Dioxide	Т	Т
Tristel Multi-Shot	UK	Soak <sup>1</sup> (HLD)	Chlorine Dioxide	Т	Т
Tristel Sporicidal Wipes	UK	Wipe (HLD)	Chlorine Dioxide	T,C,H	T,C,H
Trophon EPR	AU	Trophon EPR	Hydrogen Peroxide	N	N
		Reprocessor (HLD)			
Vaposeptol	FR	Spray, Wipe	Alcohol, Biguanide	Н	Н
		(LLD,ILD)			
Virox 5 RTU	CA	Wipe (LLD,ILD)	Hydrogen Peroxide	T,C,H	T,C,H
Wavicide -01	US	Soak <sup>1</sup> (HLD,S)	Glutaraldehyde	Т	Т
Wip'Anios	FR	Wipe (LLD,ILD)	Alohol, Quat. Ammonia	Н	Н

<sup>1</sup>Never immerse or soak a connector.

Disinfectants and Cleaning Solutions For TEE Transducers