Disinfectants for System Surfaces

The following disinfectants can be used to disinfect all surfaces of the system (including probe holders) except for the monitor and touchscreen.

Locale	Product name	Active ingredient	Manufacturer	Type
EUROPE	Perasafe	Citric acid	LANXESS Deutschland GmbH	Powder
USA	Sani-Cloth® bleach Germicidal Disposable Wipe	Sodium Hypochlorite	PDI	Wipe
USA	T.Spray II	Quaternary Ammonium(N-Alkyl)	Pharmaceutical Innovations, Inc.	Spray
USA	PROTEX® ULTRA DISINFECTANT WIPES	Quaternary Ammonium(N-Alkyl)	Parker Laboratory Inc.	Wipe
EUROPE	Wip'Anios Excel wipes	Quaternary Ammonium(N-Alkyl)	Laboratoires Anios	Wipe
EUROPE	Surfa'safe	Quaternary Ammonium(N-Alkyl)	Laboratoires Anios	Liquid
KOREA	Yuhanrox regular (Yuhanrox regular1: water10)	Sodium Hypochlorite	Yuhan clorox	Liquid
USA	Clorox regular (Clorox regular1: water10)	Sodium Hypochlorite	The Clorox Company	Liquid
KOREA	Enzysept PLUS Wipes	Quaternary Ammonium(N-Alkyl)	Wooil C&Tech	Wipe
KOREA	ED Wipes	Quaternary Ammonium(N-Alkyl)	MH healthcare	Wipe
KOREA	ANIOSURF Premium NPC	Quaternary Ammonium(N-Alkyl)	Laboratoires Anios	Liquid
EUROPE	Virkon S	Pentapotassium, Succinic acid	LANXESS Deutschland GmbH	Powder
USA	Bleach Germicidal Wipes	Sodium Hypochlorite	The Clorox Company	Wipe

Disinfectants for Monitor Surface

The following disinfectants can be used to disinfect the monitor and touchscreen.

Locale	Product name	Active ingredient	Manufacturer	Type
EUROPE	Perasafe	Citric acid	LANXESS Deutschland GmbH	Powder
USA	Sani-Cloth® bleach Germicidal Disposable Wipe	Sodium Hypochlorite	PDI	Wipe
USA	T.Spray II	Quaternary Ammonium(N-Alkyl)	Pharmaceutical Innovations, Inc.	Spray
USA	PROTEX® ULTRA DISINFECTANT WIPES	Quaternary Ammonium(N-Alkyl)	Parker Laboratory Inc.	Wipe
EUROPE	Wip'Anios Excel wipes	Quaternary Ammonium(N-Alkyl)	Laboratoires Anios	Wipe
KOREA	Yuhanrox regular (Yuhanrox regular 1: water 10)	Sodium Hypochlorite	Yuhan clorox	Liquid
USA	Clorox regular (Clorox regular 1: water 10)	Sodium Hypochlorite	The Clorox Company	Liquid
KOREA	Enzysept PLUS Wipes	Quaternary Ammonium(N-Alkyl)	Wooil C&Tech	Wipe
KOREA	ED Wipes	Quaternary Ammonium(N-Alkyl)	MH healthcare	Wipe
KOREA	ANIOSURF Premium NPC	Quaternary Ammonium(N-Alkyl)	Laboratoires Anios	Liquid
USA	Bleach Germicidal Wipes	Sodium Hypochlorite	The Clorox Company	Wipe

CAUTION:

- Using an inappropriate disinfection procedure may damage the system. Make sure that you check the disinfectant's expiry date.
- Mix the disinfectant solution to the strength specified on the instruction of the disinfectant manufacturer.
- When using a disinfectant, wipe it carefully with a soft cloth.

Using Ultrasound Gel

For successful acoustic signal transmission, please only use the ultrasound gels approved by Samsung Medison.

WARNING:

- The use of inappropriate ultrasound gels could result in damage to the probe.
  Using damaged probes may result in electric shocks and other hazards to the patients and/or users.
- Do not use ultrasound gels or coupling media that contain any of the following agents:
  - Oils such as mineral oil, cooking oil, gasoline, solvents, rust inhibitors, lanolin, paraffin-based grease, ester, and excessive silicon-based release agents;
  - Alcohols, such as acetone, methanol, and plasticizer (dioctylphtalate), or denatured alcohol;
  - Glacial acetic acid and iodine; or
  - All types of lotion or gel that contain aromatic substances

CAUTION:

- When applying the ultrasonic gel to the probe, make sure that the tip of the gel tube does not touch the surface of the probe lens.
- The tip of the gel tube may cause damage to the probe lens.

Cleaning, Disinfecting, and Sterilizing Probes

All probes must be cleaned and disinfected after each use. Cleaning is an important procedure that must be carried out before disinfecting probes. For information about cleaning and disinfecting probes, please refer to 'Cleaning, Disinfecting, and Sterilizing the Probe' in the 'Probes' chapter of the user manual. Using an inappropriate disinfectant may damage the probe.

WARNING:

- Always use protective equipment such as face mask, eyewear, and gloves when cleaning, disinfecting, and sterilizing probes.
- Inspect the housing, strain relief, lens and seal for damage, and check for any functional degradation after cleaning and disinfecting the probe.
- Using an inappropriate cleaning or disinfecting agent may damage the probe.

Information on Detergent, Disinfectant, and Ultrasound Gel

Reprocessing Method by Probe Type

To maintain the performance of ultrasound probes, proper maintenance is required.

Ultrasound probes are classified into critical, semi-critical, and non-critical medical devices, in accordance with FDA guidance* and the Hygiene Requirements for the Reprocessing of Medical Devices set forth in the guidelines of the Robert Koch Institute (RKI) in Germany. Therefore, you should use the cleaning, disinfection, and sterilization methods appropriate for each classification.

Choosing the Correct Probe-Care Method in below Table

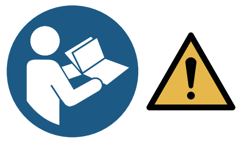
Classification Criteria	Contact Area	Application Probe	Level Selection
Non-critical medical devices	Intact skin	Curved, Linear, and Phased array probes	Low level disinfection
Semi-critical medical devices	Mucous membrane, damaged skin	Endocavity, MPTEE	High level disinfection or sterilization
Critical medical devices	Blood, sterile tissue, etc.	Intraoperative	Sterilization

* Guidance for Industry and FDA Staff – Marketing Clearance of Diagnostic Ultrasound Systems and Transducers - Appendix E

* The FDA reprocessing guidance 'Reprocessing Medical Devices in Health Care Settings: Validation Methods and Labeling, Guidance for Industry and Food and Drug Administration Staff' March 17, 2015, (https://www.fda.gov/media/80265/download)

The care method for your probes determines the appropriate disinfectant for your probe. An appropriate detergent, disinfectant or ultrasound gel should be used for all probes. For details about compatible detergent, disinfectants, and ultrasound gel, please see 'Disinfectants Matrix' on Samsung Medison website and the User Guide.

- User Guide: This is providede as a booklet upon purchase of the product.



SAMSUNG MEDISON CO., LTD.
3366, Hanseo-ro, Nam-myeon, Hongcheon-gun,
Gangwon-do 25108, REPUBLIC OF KOREA

EC REP Samsung Electronics GmbH
Am Kronberger Hang 6, 65824 Schwalbach
am Taunus GERMANY

Disinfectants Matrix

No.	Classification	Name	Type	Disinfectant Level	Manufacture	3D: CV1-8A CV1-8AD	3DC2-6	3D2-6 3D2-6ET	V2-6	3D4-8 3D4-8ET	V4-8	VE4-8	VN4-8	3D4-9 3D4-9ES	V5-9	EV3-10B	LV3-14A V6-12	EV2-10A
1	Cleaner	Alkazyme	Liquid	Cleaner	Alkapharm													
2	Cleaner	Cidezyme	Liquid	Cleaner	Advanced Sterilization Products	○							○					○
3	Cleaner	Trophon® companion cleaning wipes	Wipe	Cleaner	Nanosonics Limited													
4	Cleaner	Enzol	Liquid	Cleaner	Johnson&Johnson													
5	Cleaner	Ethanol 75%	Liquid	Cleaner	All manufacure													
6	Cleaner	Isopropyl alcohol 70%	Liquid	Cleaner	All manufacure	○	○						○					○
7	Cleaner	Klenzyme	Liquid	Cleaner	Steris	○	○	○		○			○		○(10)	○(10)		
8	Cleaner	McKesson Alcohol Prep Pad Sterile	Wipe	Cleaner	McKesson Medical-Surgical Inc.	○							○					
9	Cleaner	Metrizyme	Liquid	Cleaner	Metrex	○		X		X			○					
10	Cleaner	Aniosyme DD1	Liquid	Cleaner	Anios									○		○		
11	Disinfectants	Protex disinfectant spray	Spray	Low	Parker Laboratories, Inc.	○			○		○		○		○	○	○	
12	Disinfectants	Anios Excel Surface Premium	Liquid	Low	Anios	○	○						○					
13	Disinfectants	Clinell Universal Santitising wipes	Wipe	Low	GAMA Healthcare Ltd	●	●	●	●	●	●	●	●		●	●	●	
14	Disinfectants	Asepti-Wipes	Wipe	Low	Ecolab													
15	Disinfectants	Asepti-Wipes II	Wipe	Low	Ecolab													
16	Disinfectants	Bleach 5.25%	Liquid	Low	All manufacure													
17	Disinfectants	CaviWipes	Wipe	Low	Metrex				●						●	●		
18	Disinfectants	Cleanisept Wipe forte	Wipe	Low	Dr.Schumacher GmbH	●	●						●		●	●		
19	Disinfectants	Cleanisept Wipes	Wipe	Low	Dr.Schumacher GmbH	●	●				●	●(15)	●			●	●(15)	●
20	Disinfectants	Gigasept AF	Liquid	Low	Schulke	○			○				○			○	○	
21	Disinfectants	Incidin Foam	Spray	Low	Ecolab													
22	Disinfectants	MetriWipes	Wipe	Low	Metrex													
23	Disinfectants	Milton anti bacterial solution	Liquid	Low	Milton	○							○					
24	Disinfectants	Nuclean	Liquid	Low	Alkapharm	○							○					
25	Disinfectants	Sani-Cloth Active	Wipe	Low	PDI	●			●		●		●		●	●	●(15)	
26	Disinfectants	Sani-Cloth AF Germicidal	Wipe	Low	PDI						●				●	●		
27	Disinfectants	Sani-Cloth AF3 Germicidal	Wipe	Low	PDI	●	●				●		●		●	●		
28	Disinfectants	Sani-Cloth Bleach Germicidal	Wipe	Low	PDI	●	●				●		●		●	●		●
29	Cleaner	Endozime	Liquid	Cleaner	The Ruhof Corporation	○							○			○		
30	Disinfectants	Sani-Cloth HB	Wipe	Low	PDI	●		X		X	●	●(30)	●		●	●		
31	Disinfectants	Sani-Cloth Plus	Wipe	Low	PDI	●							●		●	●		
32	Disinfectants	Septiwipes	Wipe	Low	MEDICALIS						●	●(15)				●	●(15)	
33	Disinfectants	Sonowipes	Wipe	Low	Advanced Ultrasound Solutions Inc.	●							●					
34	Disinfectants	Ster-Bac Blu	Liquid	Low	Ecolab			X		X	○	○(50)						
35	Disinfectants	Super Sani-cloth	Wipe	Low	PDI	●							●		●	●		
36	Cleaner	Transeptic spray	Spray	Cleaner	Parker Laboratories, Inc.	○							○			○		
37	Disinfectants	T-Spray	Spray	Low	Pharmaceutical Innovations, Inc.	○	○	○	○	○	○	○	○			○	○(20)	
38	Disinfectants	T-SprayII	Spray	Low	Pharmaceutical Innovations, Inc.	○	○	○	○	○	○	○	○		○	○	○(20)	
39	Disinfectants	Anioxyde 1000	Liquid	High	Anios	○	○						○		○	○	○	○
40	Disinfectants	Cidex	Liquid	High	Advanced Sterilization Products	○	○	○	○	○	○	○(50)	○		○	○(50)	○	
41	Disinfectants	Cidex OPA	Liquid	High	Advanced Sterilization Products	○	○	○	○	○		○(15)	○	○	○(15)	○(15)	○(15)	
42	Disinfectants	Cidex Plus	Liquid	High	Advanced Sterilization Products	○	○	○	○	○			○	○	○(25)	○(25)		○
43	Disinfectants	Gigasept	Liquid	High	Schulke			X		X						○(30)		
44	Disinfectants	Gigasept FF	Liquid	High	Schulke	X		X		X	○	○(30)	X			○(30)	○(30)	
45	Disinfectants	Hibitane	Liquid	High	Regent Medical													
46	Disinfectants	Metricide	Liquid	High	Metrex	○		X		○	○	○(50)	○		○	○(50)	○(50)	
47	Disinfectants	Metricide 28	Liquid	High	Metrex						○					○		
48	Disinfectants	Metricide 30	Liquid	High	Metrex	○							○			○	○	
49	Disinfectants	Metricide OPA Plus	Liquid	High	Metrex	○	○						○		○	○		○
50	Disinfectants	Omnicide - FG2	Liquid	High	Coventry Chemicals Limited	○							○					
51	Disinfectants	Omnicide 14	Liquid	High	METREx RESEARCH CORPORATION													
52	Disinfectants	Omnicide28	Liquid	High	METREx RESEARCH CORPORATION													
53	Disinfectants/ Sterilizer	PeraSafe*	Powder	High	Dupont	○	○	X		X	○	○(15)	○		○(15)	○(15)	○(15)	○
54	Disinfectants	Salvanios pH 7	Liquid	High	Anios													
55	Disinfectants	Salvanios pH10	Liquid	High	Anios													
56	Disinfectants	Sekusept Extra	Liquid	High	Ecolab			X		X								
57	Disinfectants	Sekusept Plus	Liquid	Low	Ecolab										○(30)	○(30)		
58	Disinfectants	Sporox	Liquid	High	DSHealthcare Inc.	○	X	X		X			○	○				
59	Disinfectants	SporoxII	Liquid	High	DSHealthcare Inc.	○	X	X		X			○	○				○
60	Disinfectants	Steranios 2%	Liquid	High	Anios										○	○		
61	Disinfectants	REVITAL OX RESERT	Liquid	High	Steris	○							○		○	○	○	○
62	Disinfectants	Surfaces Hautes	Spray	High	Anios													
63	Disinfectants	Tristel Duo	Foam	High	Tristel Solutions Limited	○	○						○	○	◆	◆		○
64	Disinfectants	Tristel Sporicidal Wipe	Wipe	High	Tristel Solutions Limited	○	○						○	○		○		
65	Disinfectants	Virkon	Powder	High	Dupont													
66	Disinfectants	Wavicide-01	Liquid	High	National Therapy Products Inc.	X	○	X		○	○	○(50)	○		○(50)	○(50)	○(50)	
67	Disinfectants	Gigasept PAA	Liquid	High	Schulke													
68	Disinfection System	Antigermix S1	UV	High	Germitec													
69	Disinfection System	Trophon	Vapor	High	Nanosonics Limited	○		○	○	○	○	○	○	◆	◆	◆	○	◆

No.	Convex: C1-4EC	CS1-4	SC1-6	CA1-7A CA1-7AD	C2-4/20	C2-4ES	C2-5	CA2-6BM	C2-6 C2-6IC	CN2-8	C2-8 C2-8ED	CA2-8A CA2-8AD CF2-8	CA2-9A CA2-9AD	C3-7EP	CA3-10A	C4-9/10ED	CN4-9	C5-8 CF4-9	CA1-7S
1																			
2				○			○	○		○	○	○	○		○	X	○		
3				○								○	○		○				
4				○								○	○		○				
5																			
6			○	○			○			○	○	○	○		○	X	○		
7				○			○	○		○	○	○	○	○	○	X	○		
8				○			X			○	○	○	○		○	X	○		
9			○	○			○	○		○	X	○	○	○	○	X	○		
10												○	○					○	
11		○		○								○	○		○				
12				○							○	○	○		○				
13	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
14																			
15												●	●						
16					○														
17				X								●	●		X				
18				●				●	●			●	●		●				
19				●				●	●		●	●	●		●				
20				○								○	○		○			○(30)	
21																			
22																			
23	○			○		○	○		○	○	○	○	○		○	○	○		
24				○			○			○	○	○	○		○	X	○		
25				●								●	●		●				
26																			
27				●				●	●			●	●		●				
28				●				●	●		●	●	●		●				
29												○	○						
30		●		●			●	●		●	●	●	●	●	●	X		●(30)	
31												●	●						
32												●	●						
33				●								●	●		●				
34		○																	
35	●			●								●	●		●				
36				○								○	○		○			○(20)	
37	○		○	○			○	○		○	○	○	○	○	○	X	○	○(20)	
38	○		○	○			○	○		○	○	○	○	○	○	X	○	○(20)	
39				○				○	X		X	○	○		○			○	
40		○	○	○			○	○		○	○	○	○		○	○	○	○(50)	
41	○	○	○	○		○	○	○	○	○	○	○	○	○	○	○	○	○(15)	
42	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		○	○(25)	
43				X											X				
44	○			○		○	○		★			X	X		○			○(30)	
45																		○(30)	
46		○		○					○			○	○		○			○(50)	
47				○				○				○	○		○				
48				○								○	○		○				
49				○				○	○		○	○	○		○				
50				○			○			○	○	X	○		○	○	○		
51												○	○						
52								○	○			○	○						
53				○				○	○		○	○	○		○			○(15)	
54																			
55																			
56																			
57																			
58			○	○	○		○	○			○	○	○	○	○	X	○		
59			○	○	○		○	○			○	○	○	○	○	X	○		
60												○	○						
61				○								○	○		○				
62																			
63				○				○	○	X	○	○	○		X				
64				○				○	○		○	○	○		○				
65	○																		
66		○		○	○		○	○	○	○	○	○	○	○	○	○	○	○(50)	
67																			
68																			
69		○	○	○					○		○	○	○		○			○	

No.	Endocavity: EC4-9	EC4-9IS	ER4-9/10ED	EV4-9/10ED	EVN4-9	VR5-9	EA2-11B	EA2-11AR EA2-11AV	E3-12A	Linear: LA2-9A L4-7	L3-8	L3-12A LA3-14A LA3-14AD	LA3-16A LA3-16AD LF5-13	LA3-16AI LS6-15	LA4-18B LA4-148BD	LM4-15B	LN5-12/40	LN5-12	LF5-12	L5-12/50	LS5-13	L5-13/50	L5-13 L5-13IS	L7-16 L7-16IS	LA2-14A
1															○										
2	○		○	○	○	○	○	○			○	○	○	○	○		○	○		○		○			
3												○	○												
4			○	○	○							○	○					○				○			
5																									
6	○		○	○	○			○			○	○	○		○		○	○		○		○			
7	○		○	○	○						○	○	○	○	○		○	○		○		○			
8	○		○	○	○						○	○	○	○			○	○		○		○			
9	○		○	○	○						○	○	○	○			○	○		○		○			
10						○	○					○	○												
11			○	○	○	○	○			○		○	○			○		○				○			
12			○	○	○							○	○					X				X			
13						●	●			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
14																									
15												●	●								●				
16																									
17			X	X	X	●	●					●	●			●		●				●			
18			●	●	●	●	●					●	●	●		●		●				●	●	●	
19			●	●	●			●				●	●	●				●			●	●	●	●	
20			○	○	○	○	○			○(30)		○	○			○(30)		○				○			
21																									
22																									
23			○	○	○						○	○	○	○			○	○		○		○	○	○	
24			○	○	○						○	○	○	X			X	○		○		○			
25			●	●	●	●	●					●	●			●		●				●			
26						●	●									●									
27			X	X	X	●	●					●	●	●		●		X				X	●	●	
28			●	●	●	●	●	●				●	●	●		●		●				●	●	●	
29			○	○	○	○	○					○	○												
30			●	●	●	●	●			●(30)	●	●	●	●		●(30)	●	●	●(30)	●	●	●			
31			●	●	●	●	●	●				●	●			●		●				●			
32												●	●								●				
33			●	●	●							●	●					●				●			
34										○(50)						○(50)			○(50)		○				
35			X	X	X				●			●	●					●				●	●	●	
36			○	○	○	○	○	○		○(15)		○	○			○(15)		○				○	○(15)	○	
37			○	○	○	○	○			○(20)	○	○	○	○		○(20)	○	○	○	○	○	○	○	○	
38			○	○	○	○	○			○(20)	○	○	○	○		○(20)	○	○	○	○	○	○	○	○	
39	○		○	○	○	○	○	X		○		○	○	○		○		○				○		○	
40	○		○	○	○	○(50)	○(50)			○(50)	○	○	○	○	○	○(50)	○	○	○(50)	○	○	○			
41	◆	○	◆	◆	◆	○(15)	○(15)		○	○(15)	○	○	○	○	○	○(15)	○	○	○(15)	○	○	○	○	○	
42	○	○	○	○	○	○(25)	○(25)	○	○	○(25)	○	○	○	○		○(25)	○	○	○(25)	○	○	○	○	○	
43																									
44		○	○	○	○	○(30)	○(30)			○(30)		X	X			○(30)									
45						○(30)	○(30)			○(30)						○(30)									
46			X	X	X	○(50)	○(50)			○(50)		○	○		○	○(50)		○	○(50)		○	○			
47						○	○					○	○	○							○				
48			○	○	○							○	○	○				○				○	○		
49	○	○	○	○	○	○	○	○			○	○	○	X				○				○	X	X	
50	○		○	○	○						○	○	○	○			X	○		○		○			
51												○	○												
52												○	○												
53	X		X	X	X	○(15)	○(15)	○		○(15)		X		○		○(15)					○			○	
54																									
55															○										
56																									
57																									
58			○	○	○			X	○		○	○	X	○			X	○		○		X	○	○	
59			○	○	○			X	○		○	○	X	○			X	○		○		X	○	○	
60						○	○					○	○		○	○									
61			○	○	○	○	○	○	○	○		○	○	○		○		○				○			
62																									
63	◆		◆	◆	◆	○	○	◆	◆		○	○	○	○		○	X	X				○	○	○	
64	○		○	○	○						○	○	○	○				○				○	○	○	
65		○							○														○	○	
66	○		○	○	○	○(50)	○(50)			○(50)	○	○	○	X		○(50)	○	○	○(50)	○	○	○			
67																									
68																									
69	◆		◆	◆	◆	◆	◆	◆	◆	○		○	○	○	○			○				○		○	

No.	Phased Array: P1-4	PA1-5A	PM1-6A	PN2-4	P2-4AH	P2-4BA PE2-4	SP3-8	PA3-8B P3-8 P3-8CA	PA4-12B P4-12	CW: DP2B	CW2.0	CW4.0	CW6.0	DP8B	TEE: MMPT3-7 MPT3-7
1															
2		○		○											
3		○													
4	○	○		○	○	○		○	○					○	○
5															
6	○	○	○	○		○	○	○	○						○
7	○	○		○	○	○		○	○					○	
8		○		○											
9		○	○	○	○	○	○	○	○					○	
10		○													
11		○		○											
12		○		X											
13	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
14															
15		●													
16															
17		●		●											
18		●		●											
19		●		●											
20		○		○						○(30)	○(30)		○(30)		
21															
22															
23	○	○		○		○		○	○						
24		○		○											
25		●		●											
26						●		●							
27		●		X		●	●	●							
28		●		●		●	●	●							
29		○													
30	●	●		●	●	●		●	●	●(30)	●(30)		●(30)	●	
31	●	●		●		●		●	●						
32		●													
33		●		●											
34										○(50)	○(50)		○(50)		
35		●		●											
36		○		○						○(15)	○(15)		○(15)		
37	○	○	○	○	○	○	○	○	○	○(20)	○(20)		○(20)		
38	○	○	○	○	○	○	○	○	○	○(20)	○(20)		○(20)		
39		○		○											
40	○	○	○	○		○	○	○	○	○	○	○(50)			○
41	○	○	○	○	○	○	○	○	○	○(15)	○(15)	○	○(15)	○	◆
42	○	○	○	○	○	○	○	○	○	○(25)	○(25)	○	○(25)	○	
43															
44		X								○(30)	○(30)	○	○(30)		
45										○(30)	○(30)		○(30)		
46	○	○		○		○		○	○	○	○		○(50)		○
47		○				○	○	○							
48		○		○		○	○	○							
49		○		○											
50		○		○											
51	○	○				○		○	○						
52	○	○				○		○	○						○
53		○								○(15)	○(15)		○(15)		
54															
55	○					○		○	○						
56															
57															
58		○	○	○	○		○							○	
59		○	○	○	○		○							○	
60		○				○		○	○						
61		○		○											
62														○	
63		○					○								
64		○		○			○								
65															
66	○	○		○	○	○		○	○	○(50)	○(50)		○(50)	○	
67															◆
68	○					○		○	○						
69		○	○	○		○	○	○	○						

X = Not compatible (DO NOT USE)
○ = Compatible (From Lens to Housing)
● = Compatible (From Lens upto 50cm away from the connector)
Blank = Untested. (DO NOT USE)
★ = Staining may occur on housing parts; however, the acoustic performance and image quality are not affected.

● (5) = Must not be used longer than 5 minutes	● (15) = Must not be used longer than 15 minutes	● (25) = Must not be used longer than 25 minutes	● (50) = Must not be used longer than 50 minutes
● (10) = Must not be used longer than 10 minutes	● (20) = Must not be used longer than 20 minutes	● (30) = Must not be used longer than 30 minutes	◆ Compatible and Validated for disinfection method
All transducers are under tested in IPx 7 Criteria.			

* Perasafe is a powder product, designed for disinfection or sterilization depending on various dilution concentration and duration. For duration and method, follow the instructions of the product.
* V-PRO products include V-PRO1, V-PRO1 Plus, V-PRO Max, V-PRO Max2, V-PRO 60 sterilizer.

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MI68-03497B

Disinfectants Matrix

No.	Classification	Name	Type	Disinfectant Level	Manufacture
70	Disinfection System	Trophon2	Vapor	High	Nanosonics Limited
71	Gel	Aquasonics 100	Gel	Gel	Parker Laboratories, Inc.
72	Gel	Clear Image	Gel	Gel	NEXT Medical Products
73	Gel	Natural Image	Gel	Gel	Sonotech Inc.
74	Gel	Scan	Gel	Gel	Parker Laboratories, Inc.
75	Gel	Sonogel	Gel	Gel	Sonogel Vertriebs GmbH
76	Gel	Wavelength	Gel	Gel	National Therapy Products Inc.
77	Disinfectants	Acrylan	Liquid	Low	Antiseptica
78	Disinfectants	SEPTOL LINGETTES	Wipe	Low	ACTEON
79	Disinfectants	Wip' Anois Excel	Wipe	Low	Anios
80	Cleaner	EmPower	Liquid	Cleaner	Metrex
81	Disinfectants	HEXANIOS G+R	Liquid	Low	Anios
82	Disinfectants	Oxivir TB Wipes	Wipe	High	Diversey
83	Disinfectants	Bacillol 30 Foam	Spray	Low	BODE Chemie GmbH
84	Disinfectants	CaviCide	Spray	Low	Metrex
85	Disinfectants	Clinell UNIVERSAL SPRAY	Spray	Low	GAMA Healthcare Ltd
86	Disinfectants	gigasept FF (neu)	Liquid	High	Schulke
87	Disinfectants	Envirocide	Spray	Low	Metrex
88	Disinfectants	MetriGuard	Spray	Low	Metrex
89	Disinfectants	Chlorine 1000PPM	Liquid	High	All manufacure
90	Disinfectants	HMC NF	Powder	High	MDD COMPANY GmbH
91	Disinfectants	SCOP'ANIOS RC	Liquid	High	Anios
92	Cleaner	EmPower Foam	Liquid	Cleaner	Metrex
93	Cleaner	MetriSPONGE	Liquid	Cleaner	Metrex
94	Sterilization system	V-PRO	Vapor	High	Steris
95	Disinfectants	Chlordioxid Losung	Liquid	High	vitalundfitmit100 UG
96	Cleaner	Endozime Xtreme Power	Liquid	Cleaner	Ruhof Healthcare
97	Disinfectants	Surfanios Premium	Liquid	Low	Anios
98	Disinfectants	Virkon S	Liquid	High	Dupont
99	Disinfectants	V-Wipes	Wipe	Low	Whiteley Corporation
100	Disinfectants	terralin PAA	Liquid	High	Schulke
101	Disinfectants	Rapizide OPA/28	Liquid	High	Cantel Medical
102	Cleaner	Tristel Pre-clean wipe	Wipe	Cleaner	Tristel Solutions Limited
103	Disinfectants	Biguacid S	Liquid	Low	Antiseptica
104	Disinfectants	deconex 11 UNIVERSAL	Liquid	Low	Borer Chemie AG
105	Disinfectants	MEDI CLEN	Liquid	Low	UBM Cleaning Solution INC
106	Disinfectants	saFecide	Wipe	Low	Liebecos
107	Disinfectants	SURFA' SAFE	Liquid	Low	Anios
108	Disinfectants	Mikrobac Tissues	Wipe	Low	BODE Chemie GmbH
109	Disinfectants	Meliseptol Wipes Sensitive	Wipe	Low	B. Braun Medical AG
110	Disinfectants	Mikrozid sensitive liquid	Liquid	Low	Schulke
111	Disinfectants	Mikrozid sensitive Wipes	Wipe	Low	Schulke
112	Disinfectants	Mikrozid universal liquid	Liquid	Low	Schulke
113	Disinfectants	Mikrozid universal Wipes premium	Wipe	Low	Schulke
114	Disinfectants	Protex ultra	Wipe	Low	Parker Laboratories, Inc.
115	Disinfectants	Descogen-I	Liquid	High	Antiseptica
116	Disinfectants	gigasept pearls	Powder	High	Metrex
117	Disinfectants	Metricide Plus 30	Liquid	High	Metrex
118	Disinfectants	V Wipes	Wipe	Cleaner	Whiteley Medical
119	Disinfectants	CaviWipes AF	Wipe	Low	Metrex
120	Disinfectants	Protex disinfectant wipes	Wipe	Low	Parker Laboratories, Inc.
121	Disinfectants	Tristel Rinse Wipes	Wipe	Cleaner	Tristel Solutions Limited
122	Disinfectants	Clorox Healthcare™ Professional Disinfecting Bleach Wipes	Wipe	Low	Clorox
123	Disinfectants	Sani-Cloth Detergent Wipes	Wipe	Low	PDI
124	Disinfectants	SciCan Optim 33TB Surface CleaneDisinfectant Solution	Liquid	High	SciCan
125	Disinfectants	SciCan Optim 33TB Surface CleaneDisinfectant Wipes	Wipe	High	SciCan
126	Disinfectants	VERT 2 GO ED	Liquid	Low	Wood Wyant
127	Disinfectants	Bacillol 30 Tissue	Wipe	High	BODE Chemie GmbH
128	Disinfectants	Descoton Extra	Liquid	High	Dr.Schumacher GmbH
129	Disinfectants	Sekusept Aktiv	Powder	High	Ecolab
130	Disinfectants	Clinell Universal wipes	Wipe	Low	GAMA Healthcare Ltd
131	Disinfectants	Medilox	Liquid	High	Soosan CMC
132	Disinfectants	Clorox Healthcare Hydrogen peroxide wipes	Wipe	High	Clorox
133	Disinfectants	Medipal Alcohol Disinfectant Wipes	Liquid	Low	Pal International limited
134	Disinfectants	3M SURFACE DISINFECTANT CLEANER WIPES	Wipe	Low	3M
135	Disinfectants	Medipal 3in1	Wipe	Low	Pal International limited
136	Disinfectants	WIP'ANIOS SPOR'	Liquid	High	Anois
137	Disinfectants	Pera flu	Wipe	High	SH
138	Disinfectants	SURFA'SAFE PREMIUM	spray	Low	Anois
139	Disinfectants	Azomax	spray	Low	Synergy Health Ltd
140	Disinfectants	Sani Cloth active	Wipe	Low	Ecolab
141	Disinfectants	Incidin oxywipe	Wipe	High	Ecolab
142	Disinfectants	Incidin oxywipe S	Wipe	High	Ecolab
143	Disinfectants	绿先锋消毒剂	Liquid	High	Techgreen

3D

No.	CV1-8A CV1-8AD	3DC2-6	3D2-6 3D2-6ET	V2-6	3D4-8 3D4-8ET	V4-8	VE4-8	VN4-8	3D4-9 3D4-9ES	V5-9	EV3-10B	LV3-14A V6-12	EV2-10A
70	○		○	○	○	○	○	○	◆	◆	◆	○	◆
71	○	○	○	○	○	○	○	○	○	○	○	○	○
72													
73													
74				○		○	○			○	○	○	
75				○		○	○			○	○	○	
76													
77	○	○						○			○		
78													
79										●	●		
80	○							○			○		
81	○							○					
82	★							★		○	○		
83	○							○			○		
84	○							○		○	○		
85										○	○		
86	X							X					
87													
88	○							○					
89													
90	○							○		○	○		
91	○							○					
92	○							○					
93	○							○					
94													
95													
96													
97													
98	○							○					
99	●							●					
100													
101										○	○		
102										○	○		
103	○							○		○	○		
104													
105													
106													
107										○	○		
108	●							●			●		
109													
110	○							○			○		
111	●							●			●		
112													
113													
114													
115	○							○					
116	○							○			○		
117										○	○		
118										○	○		
119										●	●		
120	●							●		●	●		
121										○	○		
122	●							●		●	●		
123	●							●					
124	○							○					
125	○							○					
126	○							○					
127	○							○					
128	○							○					
129	○							○					
130	●	●	●	●	●	●	●	●		●	●	●	
131	○							○					
132	○							○					
133	○							○					
134	●							●					
135													
136													
137	○							○					
138	○							○					
139	○							○					
140													
141													
142													
143													

Convex

No.	C1-4EC	CS1-4	SC1-6	CA1-7A CA1-7AD	C2-4/20	C2-4ES	C2-5	CA2-6BM	C2-6 C2-6IC	CN2-8	C2-8 C2-8ED	CA2-8A CA2-8AD CF2-8	CA2-9A CA2-9AD	C3-7EP	CA3-10A	C4-9/10ED	CN4-9	C5-8 CF4-9	CA1-7S
70		○	○	○					○		○	○	○		○			○	
71	○	○	○	○			○				○	○	○		○			○	
72																			
73								○				○	○	○					
74		○	○															○	
75		○																○	
76																			
77				○			○					○	○		○				
78																			
79				●								●	●		●				
80				○								○	○		○				
81				○								○	○		○				
82				○								○	○		○			○	
83				○								○	○		○				
84												○	○						
85																			
86				X								○	○		X				
87																			
88																			
89																			
90				○								○	○		○				
91				X								○	○		X				
92				○								○	○		○				
93				○								○	○		○				
94																			
95																			
96																			
97												○	○						
98				○											○				
99																			
100				X											X				
101												X	X						
102				○								○	○		○				
103																			
104												○	○						
105				X								○	○		X				
106																			
107																			
108																			
109											●	●	●						
110																			
111												●	●						
112																			
113																			
114				●								●	●		●				
115												○	○						
116												○	○						
117																			
118																			
119																			
120																			
121																			
122												●	●						
123												●	●						
124				○								○	○		○				
125												○	○						
126												○	○						
127												○	○						
128												○	○						
129																			
130	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
131																			
132				○								○	○		○				
133												○	○						
134												●	●						
135								●											
136																			
137				○								○	○		○				
138								○											
139				○								○	○		○				
140				○								○	○		○				
141															●			X	●
142															●			●	X
143																			

Endocavity

No.	EC4-9	EC4-9IS	ER4-9/10ED	EV4-9/10ED	EVN4-9	VR5-9	EA2-11B	EA2-11AR EA2-11AV	E3-12A
70	◆		◆	◆	◆	◆	◆	◆	◆
71			○	○	○	○	○		○
72									
73									
74						○	○		
75						○	○		
76									
77			○	○	○	○	○		
78									
79			●	●	●	●	●		
80			○	○	○	○	○	○	
81			○	○	○				
82			○	○	○			○	
83			○	○	○				
84			○	○	○	○	○		
85			○	○	○	○	○		
86			○	○	○				
87			○	○	○				
88			○	○	○				
89			○	○	○				
90			○	○	○	○	○		
91									
92			○	○	○				
93			○	○	○				
94			○	○	○				
95			○	○	○				
96			○	○	○				
97									
98			○	○	○				
99									
100									
101			○	○	○	○	○		
102			○	○	○	○	○		
103						○	○		
104									
105			○	○	○				
106									
107						○	○		
108			●	●	●	●	●		
109									
110			○	○	○	○	○		
111						●	●		
112									
113			X	X	X				
114			●	●	●				
115			○	○	○				
116						○	○		
117						○	○		
118						○	○		
119						●	●		
120			●	●	●	●	●		
121						○	○		
122			●	●	●				
123			●	●	●				
124			○	○	○				
125			○	○	○				
126			○	○	○				
127			○	○	○				
128			○	○	○				
129			X	X	X				
130						●	●		
131			X	X	X				
132			X	X	X				
133									
134									
135								●	
136									
137									
138									
139			○	○	○			○	
140									
141									
142									
143									

Linear

No.	LA2-9A L4-7	L3-8	L3-12A LA3-14A LA3-14AD	LA3-16A LA3-16AD LF5-13	LA3-16AI LS6-15	LA4-18B LA4-148BD	LM4-15B	LN5-12/40	LN5-12	LF5-12	L5-12/50	LS5-13	L5-13/50	L5-13 L5-13IS	L7-16 L7-16IS	LA2-14A
70	○		○	○	○	○			○				○		○	
71	○	○	○	○	○	○	○		○	○	○	○	○	○	○	
72										○						
73			○	○												
74	○						○			○						
75	○						○			○						
76										○						
77			○	○					○				○			
78						X										
79			●	●			●		●				●			
80			○	○					○				○			
81			○	○					X				X			
82	○		○	○		○	○		○				○			
83			○	○					○				○			
84			○	○			○									
85																
86			○	○												
87																
88																
89																
90			○	○			○		○				○			
91			○	○					X				X			
92			○	○					○				○			
93			○	○					○				○			
94																
95																
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97			○	○												
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101			X	X			○		○				○			
102			○	○			○		○				○			
103							○		X				X			
104			○	○					★				★			
105			○	○					○				○			
106									●				●			
107							○		○				○			
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122			●	●					●				●			
123			●	●					●				●			
124			○	○					○				○			
125			○	○					X				X			
126			○	○					○				○			
127			○	○												
128			○	○					○				○			
129																
130	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
131																
132			○	○					○				○			
133			○	○					○				○			
134			●	●					●				●			
135						●										
136																
137			○	○												
138									○				○			
139			○	○					○				○			
140			○	○					○				○			
141					●	●										●
142					●	●										●
143			X													

Phased Array / CW / TEE

No.	P1-4	PA1-5A	PM1-6A	PN2-4	P2-4AH	P2-4BA PE2-4	SP3-8	PA3-8B P3-8 P3-8CA	PA4-12B P4-12	DP2B	CW2.0	CW 4.0	CW6.0	DP8B	MMPT3-7 MPT3-7
70		○	○	○		○	○	○	○						
71		○	○	○		○	○	○	○	○	○		○		○
72															
73		○			○									○	
74			○				○			○	○		○		
75										○	○		○		
76															
77		○		○											
78															
79		●		●											
80		○		○											
81		○		X											
82		○		○											
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90		○		○											
91		○		X											
92		○		○											
93		○		○											
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97		○													
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101		X		○											
102		○		○											
103				X											
104		○		★											
105		○		○											
106				●											
107				○											
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119															
120															
121															
122		●		●											
123				●											
124		○		○											
125		○		X											
126		○		○											
127		○													
128		○		○											
129															
130	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
131		○													
132		○		○											
133				○											
134		●		●											
135															
136															
137		○													
138				○											
139		○		○											
140		○		○											
141															
142															
143															

X = Not compatible (DO NOT USE)			
○ = Compatible (From Lens to Housing)			
● = Compatible (From Lens upto 50cm away from the connector)			
Blank = Untested. (DO NOT USE)			
★ = Staining may occur on housing parts; however, the acoustic performance and image quality are not affected.			
● (5) = Must not be used longer than 5 minutes	● (15) = Must not be used longer than 15 minutes	● (25) = Must not be used longer than 25 minutes	● (50) = Must not be used longer than 50 minutes
● (10) = Must not be used longer than 10 minutes	● (20) = Must not be used longer than 20 minutes	● (30) = Must not be used longer than 30 minutes	◆ Compatible and Validated for disinfection method
All transducers are under tested in IPx 7 Criteria.			

* Perasafe is a powder product, designed for disinfection or sterilization depending on various dilution concentration and duration. For duration and method, follow the instructions of the product.
* V-PRO products include V-PRO1, V-PRO1 Plus, V-PRO Max, V-PRO Max2, V-PRO 60 sterilizer.

ⓘ https://www.samsunghealthcare.com/en/products/UltrasoundSystem

Validated High Level Disinfection Instruction for Samsung Endo Cavity transducers

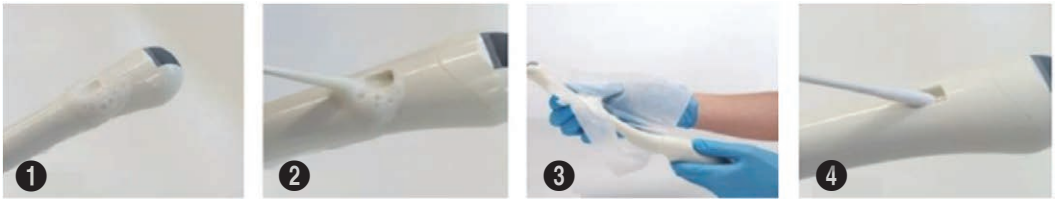
Tristel Duo – High Level Disinfection Method

1. Personal Protection

- Personal protection must always be worn when handling possibly contaminated ultrasound probes. Personal protection at least includes gloves and eye protection.
- Once you are wearing personal protection, you are ready to begin the cleaning and disinfection process.

2. Cleaning the Probe

- The first step in the high-level disinfection process is thorough cleaning. Possibly contaminated probes must be thoroughly cleaned before they can be disinfected.
- Hold the probe and put one aliquot of Tristel duo in the indentation of the probe ❶
- Use a swab to spread the Tristel Duo liquid in the indentation(s) ❷
- Put 2 aliquots of Tristel Duo on a Tristel Dry Wipe and clean the transducer from handgrip to the tip of the probe ❸
- Use another dry swab to dry and clean the indentation(s) ❹



3. Disinfecting the Probe

- Tristel Duo incorporates two separate compartments that contain the Tristel Base and the Tristel Activator solutions that create chlorine dioxide when mixed (1:1). Tristel Duo foam is generated by depressing the incorporated pump.
- Change your gloves.
- Hold the probe and put one aliquot of Tristel duo in the indentation of the probe.
- Use a swab to spread the Tristel Duo liquid in the indentation(s).
- Put 2 aliquots of Tristel Duo on a Tristel Dry Wipe and disinfect the transducer with rotations from handgrip to the tip of the probe. Leave the disinfectant on the probe for at least 30 seconds.
- Use another dry swab to dry the indentation(s).
- Leave the surface to dry to ensure a 30 second contact time.

- Discard the used wipes, swab and gloves to clinical waste, do not macerate. Do not re-use.
- Disinfected probe should be used immediately or stored in a manner to minimize recontamination.

CIDEX® OPA Solution – High Level Disinfection Method

1. Personal Protective Equipment

- Personal protective equipment must always be worn when handling contaminated instruments an equipment. Personal protective equipment includes gloves, eye protection and fluid-repellent gown.
- Once you are wearing personal protective equipment, you are ready to begin the disinfection process.

2. Clean Instruments

- The first step in the high-level disinfection process is thorough cleaning. Contaminated probes must be thoroughly cleaned with a detergent prior to disinfection, especially take case of ridges and biopsy guide mountings.
- Following cleaning, rinse probe surface with large amounts of fresh water to remove residual detergent.

3. Using CIDEX® OPA Solution

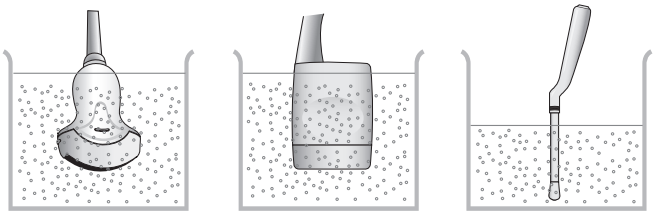
- Before using the solution, be sure to read the directions for use on the bottle label and package insert. The shelf life of an unopened bottle of CIDEX® OPA Solution is two years. The solution requires NO activation.

4. Test

- Concentration of this product during its reuse life must be verified by the CIDEX® OPA Test Strip prior to each use to determine that the concentration of ortho-phthalaldehyde is above the MEC of 0.3%.
- CIDEX® OPA Solution shall not be used beyond 14 days.

5. Disinfect

- Prepare a ready-to-use CIDEX® OPA (Ortho-phthalaldehyde) solution with a concentration of at least 0.55% using the manufacturer's instructions.
- Fill tray, basin or tall container with Cidex OPA at ambient room temperature (approximately 20–25°C) to a level allowing immersion of the probe up to the immersion line as shown below.



- Cover the CIDEX® Solution Tray with a secure lid. Soak probe for 12 minutes at 20–25°C to achieve high-level disinfection.
- Immerse probes in Cidex OPA at least until the immersion limits and ensure no air or bubbles are trapped. Allow soaking for minimum twelve (12) minutes.
- Excessive soaking time is not recommended as it may result in residues that result in patient allergic reactionor tissue discoloration.
- Cidex OPA solution shall not be reused beyond 14 days. Cidex OPA solution shall not be reused if con-centration of active ingredient is below Minimum Effective Concentration of ortho-phthalaldehyde (0.3% w/v).

6. Rinse

- Remove probes from the solution and thoroughly rinse all surfaces up to the immersion line in shown in three (3) times with fresh sterile water, each time for a minimum of one (1) minute.

7. Dry

- Thoroughly dry all surfaces of the probe using a sterile, lint-free wipe or cloth, changing wipes/cloths when necessary to ensure the probe is completely dry. Visually inspect the probe to ensure all surfaces are clean and dry. Repeating drying steps if any moisture is visible.
- Disinfected probe should be used immediately or stored in a manner to minimize recontamination.

8. Dispose

- CIDEX® OPA Solution can be discarded down hospital and office drains or in accordance with local regulations.

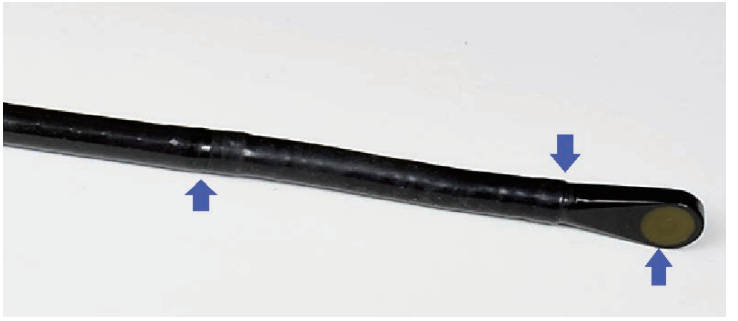
Gigasept PAA Concentrate – High Level Disinfection Method for TEE probe

1. Personal Protection

- Personal protective equipment must always be worn when handling possibly contaminated probes. Personal protective equipment includes gloves, eye protection and fluid-repellent gown.
- Once you are wearing personal protective equipment, you are ready to begin the disinfection process.

2. Cleaning the TEE Probe

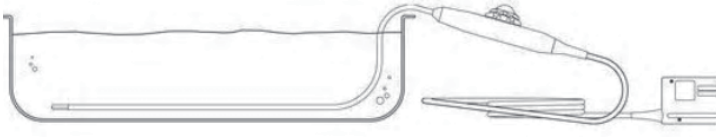
- The first step in the high-level disinfection process is thorough cleaning. Possibly contaminated probes must be thoroughly cleaned prior to disinfection.
- Thoroughly clean the probe with a detergent especially taking care of the junctions of the flexible part and the indentation on the scan head (see Figure 1).
- Wipe the TEE probe with 5 Tristel Dry Wipes soaked with 8 ml 1.6% CIDEZYME and wipe for 3 minutes.
- Rinse the TEE probe for 1 minute with a 1% sodium dodecyl sulphate (SDS) solution.



[Figure 1. TEE probe MMPT3-7 with contamination spots (arrows)]

3. Disinfecting the TEE Probe

- Prepare a Gigasept® PAA solution with a concentration of at least 2% using the manufacturer's instructions.
- Place the TEE probe in the 2% Gigasept® PAA solution as shown in Figure 2.
- Ensure that all air is removed from the surface of the TEE probe.
- Leave the TEE probe for at 15 minutes in the solution.



[Figure 2. Do not immerse beyond this point, 5cm from the strain relief]

- Gigasept® PAA solution shall not be reused beyond 12 hours.

4. Rinse

- Remove the TEE probe from the solution and thoroughly rinse all surfaces up to the immersion point as shown, repeat this process two more times with sterile water, each time for a minimum of one (1) minute.

5. Dry

- Thoroughly dry all surfaces of the probe using a sterile, lint-free wipe or cloth, changing wipes/cloths when necessary to ensure the probe is completely dry. Visually inspect the probe to ensure all surfaces are clean and dry. Repeat the drying steps if any moisture is still visible.
- Disinfected probe should be used immediately or stored in such a way that recontamination is prevented.

6. Disposal of the Disinfection Solution

- According to the manufacturer Gigasept® PAA Solution can be discarded down hospital- and office drains. Recommendation however is to check the local regulations first.