

Transducer Cleaning & Disinfection Guide

Product Lines

Resona series

DC series

M series

TE series

Z series

mindray

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Safety Precautions



1. Confirm that the transducer and cable work well before and after each examination. A defective transducer may cause electric shock to the patient.
2. Protect the probe from the collision. A defective transducer may cause electric shock to the patient.
3. Do not disassemble the transducer to avoid the possibility of electric shock.
4. Never immerse the transducer connector into liquids such as water or disinfectant because the connector is not waterproof. Immersion may cause electric shock or malfunction.
5. The ultrasonic transducer is only for use with the specified ultrasonic diagnostic system. Please refer the ultrasonic diagnostic system operation manual to select the proper transducer.
6. A transducer cover must be installed over the transducer before performing examination.
7. Do not use an aftermarket probe other than those specified by Mindray. The probes may damage the system causing a profound failure, e.g. a fire in the worst case.
8. When using the transducer, wear sterile gloves to prevent infection.
9. Be sure to use ultrasound gel. Please use the ultrasound gel compliant with the relevant local regulations.
10. Do not use the carrying case for storing the transducer. If the carrying case is used for storage, it may become a source of infection.
11. The transducer and accessories supplied with it are not delivered disinfected or sterilized. Sterilization (or high-level disinfect) before use is required.
12. Please use the disinfection or sterilization solution that is recommended in this operator's manual, otherwise Mindray will not be liable for damage caused by other solutions. If you have any questions, please contact Mindray Customer Service Department or sales representative.
13. Do not use pre-lubricated condoms as a cover. Lubricant may not be compatible with the transducer material and damage may result.
14. Transducer damage may be caused by inappropriate gel, detergent or cleanser: Do not soak or saturate transducers with solutions containing alcohol, bleach, ammonium chloride compounds, acetone or formaldehyde. Avoid contact with solutions or coupling gels containing mineral oil or lanolin.
15. Before connecting or disconnecting the transducer, freeze or turn off the ultrasonic diagnostic system.
16. Clean and disinfect the transducer before and after each examination.
17. To prevent the transducer from being damaged, do not use it where it will be exposed to:
 - direct sunlight or X-rays
 - sudden changes in temperature or excessive vibration
 - dust or heat generators

1. Inspection Before and After Use

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

1.1 CHECKING THE EXTERNAL APPEARANCE OF THE TRANSDUCER

Confirm that there are no abnormalities of the transducer surface or cable cover, such as peeling, cracks, protruding parts, or looseness of the acoustic lens, before and after each examination.



Transducer abnormalities may cause electric shock or injury to the patient. If any abnormality is found, immediately stop using the transducer and contact your MINDRAY Customer Service Department or sales representative.

1.2 CLEANING THE TRANSDUCER

Clean and disinfect the transducer before and after each examination by hospital regulation.



If you don't clean and disinfect the transducer, it may become a source of infection.

1.3 CHECKING AFTER TURNING ON THE SYSTEM

After turning ON the power of the ultrasonic diagnostic system, perform the following checks:

1. The acoustic lens of the transducer must not generate abnormal heat while it is being used. The transducer temperature should be checked by hand.
2. The image must not be abnormal while turning on the system.

1.4 UTILIZING THE TRANSDUCER COVER

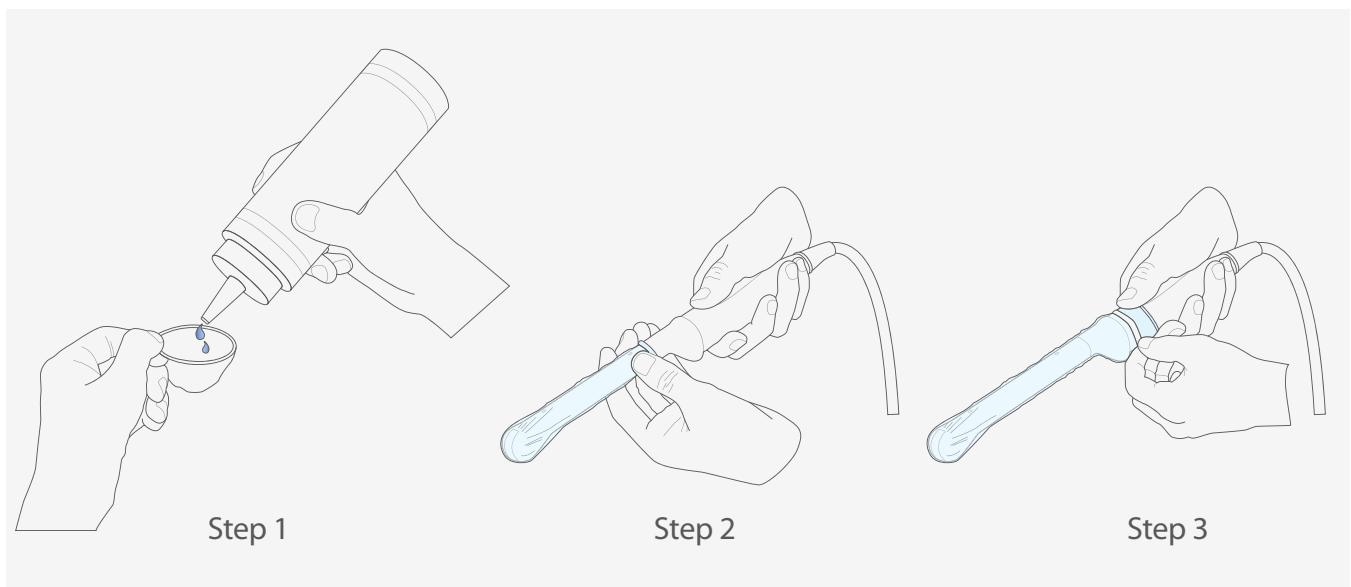


1. Be sure to cover the transducer with a new (unused) transducer cover to prevent infection during examination. If the package of a transducer cover is open or broken, the sterilization of the transducer cover may not be sufficient. **DO NOT** use such a transducer cover.
2. The cover contains natural rubber latex and talc that can cause allergic reactions in some individuals.
3. **DO NOT** use an expired transducer cover. Before using transducer covers, verify whether the term of validity has expired.

A legally marketed transducer cover must be installed over the transducer before performing intra-cavitary examination. Protective barriers may be required to minimize disease transmission. Transducer covers are available for use with all clinical situations where infection is a concern.

METHOD (FOR REFERENCE ONLY):

1. Place an appropriate amount of gel inside the cover or on the transducer acoustic lens. Poor imaging may result if no gel is used.
2. Insert the transducer into the cover. Pull cover tightly over transducer acoustic lens to remove wrinkles and air bubbles, and taking care to avoid puncturing the cover.
3. Secure the cover with the enclosed elastic bands.
4. Inspect the cover to ensure there are no holes or tears.



To order probe covers, contact CIVCO company:

Toll-free within the U.S. & Canada: 800.445.6741
Toll-free Fax: 877.329.2482
Direct Dial: 319.248.6757 (International)
Fax: 319.248.6660
Email: order@civco.com
Website: www.civco.com

2. Cleaning and Disinfection

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



1. When performing cleaning and disinfection of the probe to prevent infection, wear sterile gloves.
2. After disinfection, rinse the probe thoroughly with sterile water to remove all chemical residues. Chemical residues on the probe may be harmful to the human body.
3. Not cleaning and disinfecting may result in the probe becoming a source of infection.

NOTE: After the examination, wipe off the ultrasound gel thoroughly. Otherwise, the ultrasound gel may solidify and degrade the image quality of the transducer.

NOTE: DO NOT overheat the probe (more than 55°C) during cleaning and disinfections. High temperature may cause the probe to become deformed or damaged.

2.1 CLEANING

Please refer to the instructions in the manual and follow your hospital policy and procedures for cleaning.

1. Disconnect the probe from the system.
2. Wear sterile gloves to prevent infection.
3. Wash the transducer with clean water or soapy water to remove all the foreign matters, or wipe the transducer with a soft ethyl carbamate sponge. Avoid using a brush, because it may damage the transducer.
4. Dry the transducer using a sterile cloth or gauze after rinsing.
Do not dry the transducer by heating it.

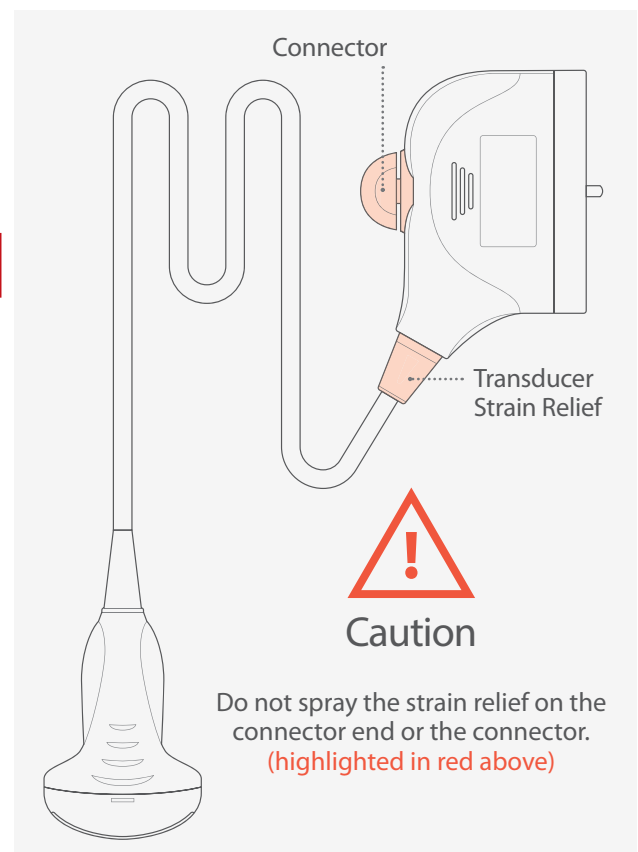
2.2 DISINFECTING WITH SPRAYS OR WIPES



Use protective eyewear when disinfecting using sprays.

1. Wear sterile gloves to prevent infection.
2. After you have finished cleaning, spray or wipe the transducer with a disinfectant. Follow the disinfectant manufacturer's recommended contact time and mode.
3. Remove any residue with a water-moistened soft cloth on the transducer.
4. Wipe off water on the transducer using sterile cloth or gauze after washing.

NOTE: Do not spray the strain relief on the connector end or the connector.

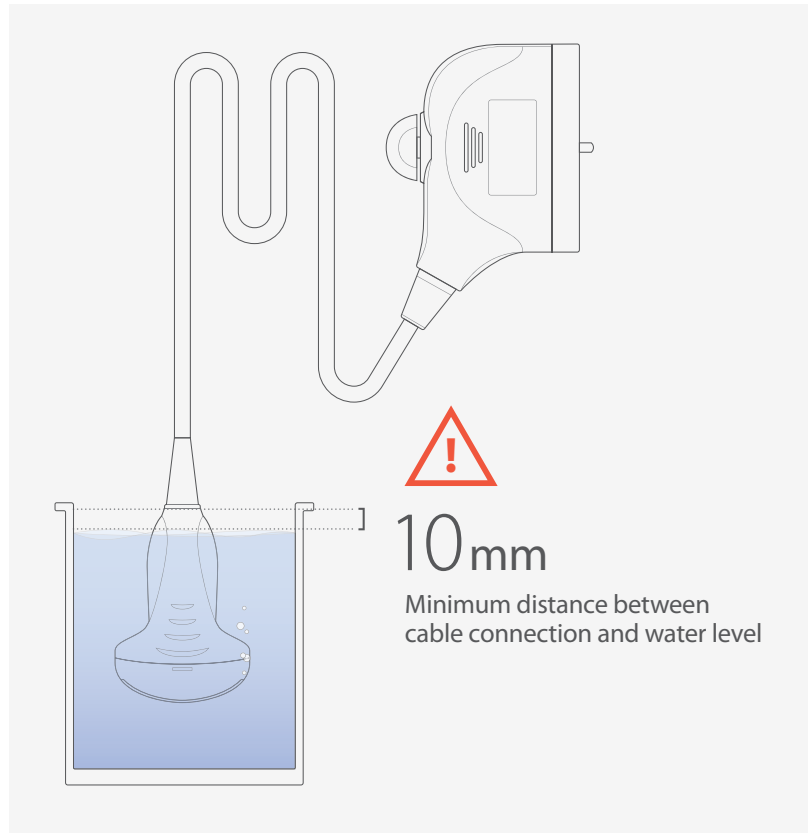


2.3 DISINFECTING BY IMMERSION

1. Wear sterile gloves to prevent infection.
2. Clean the transducer before disinfecting it. MINDRAY recommends the following solutions to disinfect the transducer. Refer to the instructions provided by the chemical manufacturer concerning concentration of the disinfectant solution, method of disinfection and dilution and cautions during use. Do not soak the transducer connector or the cable near it into water or any solution. Soak the transducer into the disinfectant solution for the shortest time the manufacturer recommends (for example, the shortest time recommended by the manufacturer for soaking Cidex OPA is 12 minutes). Follow local regulations when selecting and using the disinfectant.
3. Rinse the transducer with plenty of sterile water (about 2 gallons) for at least 1 minute to remove all chemical residues on it. Or, follow the rinsing method recommended by the disinfectant manufacturer to rinse the transducer.
4. Wipe off the water on the transducer with sterile cloth or gauze after rinsing it. Do not dry the transducer by heating.

NOTE: Observe the figure to the right carefully to immerse the transducer. Only soak parts of the transducer below the strain relief.

NOTE: Repeated disinfection will eventually damage the probe, please check the probe performance periodically.



2.4 STERILIZATION (INTRA-OPERATIVE USE)

1. Wear sterile gloves to prevent infection.
2. Clean the transducer before sterilizing it. Disinfect the transducer if necessary. MINDRAY recommends the following solutions to sterilize the transducer:

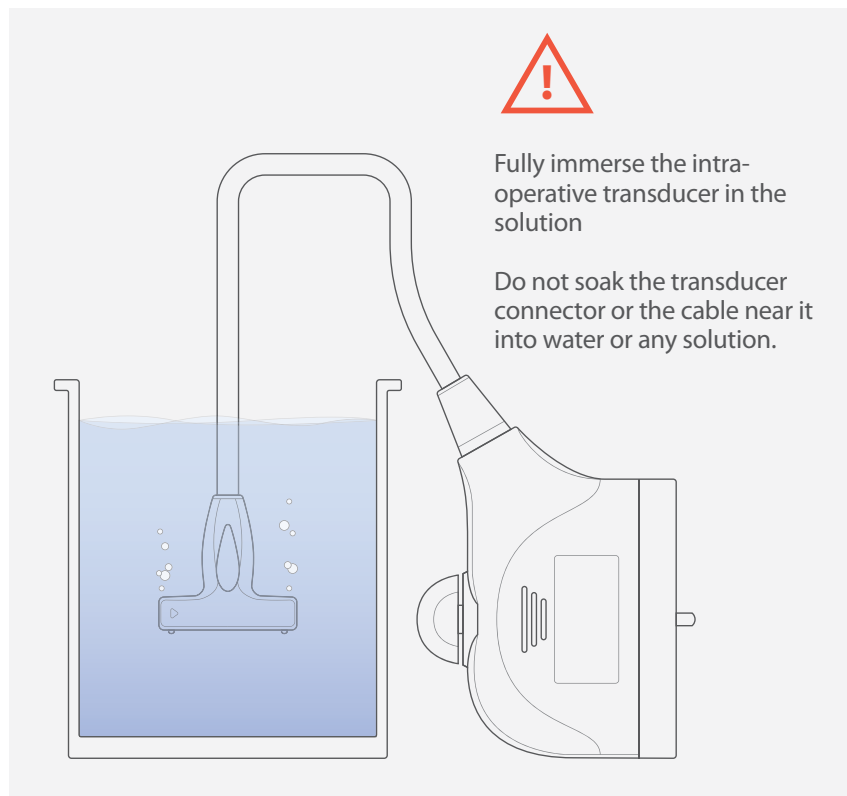
Hydrogen Peroxide and Peroxyacetic Acid -based sterilization solution

Trade Name	Chemical Name	Procedures
Minnicare®	22% Hydrogen Peroxide	Dilute the sterilant with sterilized purified water (1:20)
Cold Sterilant	4.5% Peroxyacetic Acid	Immersed time: 11 hours. Temperature: 20°-25°C. Please refer to the instructions provided by the manufacturer of the solution for details.

Glutaraldehyde-based sterilization solution

Trade Name	Chemical Name	Procedures
Cidex Activated Glutaraldehyde Solution	2.4% Glutaraldehyde	Soak the transducer into the activated solution for 10 hours (20°-25°C). Please refer to the instructions provided by the manufacturer of the solution for details.

- Refer to the instructions provided by the chemical manufacturer concerning concentration of the sterilization solution, method of sterilization and dilution and cautions during use.
 - Do not soak the transducer connector or the cable near it into water or any solution.
 - Follow local regulations when selecting and using the sterilization solution.
3. Rinse the transducer with plenty of sterile water (about 2 gallons) for at least 1 minute to remove all chemical residues on it. Or, follow the rinsing method recommended by the sterilization solution manufacturer to rinse the transducer.
 4. Wipe off the water on the transducer with sterile cloth or gauze after rinsing it. Do not dry the transducer by heating.



Before safety and performance is affected, intra-operative probes can be sterilized by Cidex Activated Glutaraldehyde Solution for at least 217 times (10 hours for one time).

Before safety and performance is affected, intra-operative probes can be sterilized by Minncare COLD STERILANT for at least 135 times (11 hours for one time).

Appendix B - Spray Disinfectants

TABLE B-1 CONVEX PROBES

	Oxivir™ ^{MM} C Tb	PI-SPRAY-II	Surfa'safe	TRANSEPTIC	PROTEX™ DISINFECTANT SPRAY	Tristel Solo	IODOCLEAN
C5-1s / C5-1E / C5-1U	●	●	●				
C5-2 / C5-2s / C5-2E	●	●	●				
C6-2E	●	●	●				
C6-2Gs / C6-2GE / C6-2GU	●	●	●				
C7-3E	●	●	●	●	●	●	●
C11-3E / C11-3s / C11-3U	●	●	●	●	●	●	●
3C1 / 3C1s / 3C1p	●	●	●	●	●	●	●
3C5 / 3C5s / 3C5A / 3C5P	●	●	●	●	●	●	●
6C2 / 6C2P / 6C2s	●	●	●	●	●	●	●
35C20EA / 35C50EA 35C50EB / 35C50P	●	●	●	●	●	●	●
65C15EAV / 65C15EA	●	●	●	●	●	●	●
SC5-1U / SC5-1E	●		●				
SC6-1U / SC6-1s	●	●	●				
SC8-2U		●		●			
65EC10EA / 65EC10EB 65EC10EC		●		●	●	●	
65EL60EA		●		●	●	●	
65EC10ED		●		●	●	●	

TABLE B-2 LINEAR PROBES

	Oxivir™ ^{MM} C Tb	PI-SPRAY-II	Surfa'safe	TRANSEPTIC	PROTEX™ DISINFECTANT SPRAY	Tristel Solo	IODOCLEAN
L7-3 / L7-3s / L7-3E	●	●	●	●	●	●	●
L9-3U	●	●	●		●		●
L10-3E / L10-3s							
L11-3U	●	●	●				
L11-4 / L11-4s	●	●	●				
L12-3 / L12-3E	●	●	●		●		●
L12-4 / L12-4s	●	●	●		●		●
L14-6 / L14-6s / L14-6P	●	●	●				
L14-6N / L14-6Ns L14-6NP / L14-6NE	●	●	●		●		●
L14-6WE / L14-6Ws / L14-6WU	●	●	●		●		●
L16-4HE / L16-4Hs / L16-4HU							
LM14-6E / LM14-6s / LM16-4U	●	●	●	●	●	●	●
L20-5U / L20-5s / L20-5E		●					
6LE7 / 6LE7s / 6LE7P		●		●	●	●	
6LE5V / 6LE5Vs / 6LE5VP		●		●	●	●	
7L4 / 7L4s / 7L4A / 7L4P	●	●	●	●	●	●	●
7LT4 / 7LT4s / 7LT4P		●		●	●	●	
7L5 / 7L5P / 7L5s	●	●	●	●	●	●	●
7L6 / 7L6s	●	●	●	●	●	●	●
10L4 / 10L4s							
10L24EA	●	●	●				
50L60EAV		●		●	●	●	
65L50HAV		●		●	●	●	
75L38EA / 75L38EB 75L53EA / 75L60EA / 75L38P	●	●	●	●	●	●	●
75L50EAV / 75LT38EA		●		●	●	●	

TABLE B-3 OTHER TYPES OF PROBES

		Oxivir™ TM Tb	PI-SPRAY-II	Surfa'safe	TRANSEPTIC	PROTEX™ TM DISINFECTANT SPRAY	Tristel Solo	IODOCLEAN
Phased	P4-2 / P4-2s / P4-2E / P4-2NE / P4-2Ns	●	●	●	●	●	●	●
	P7-3 / P7-3s / P7-3E / P7-3P / P7-3U				●	●	●	
	P10-4E / P10-4s / P10-4U	●	●	●	●	●	●	●
	P12-4 / P12-4s	●	●			●		
	2P2 / 2P2s / 2P2P	●	●	●	●	●	●	●
	SP5-1U / SP5-1s / SP5-1E	●	●	●		●	●	
Endo-cavity	V11-3 / V11-3BE / V11-3B V11-3WE / V11-3Ws / V11-3E		●		●	●	●	
	V11-3HU / V11-3Hs	●	●	●				
	V10-4 / 10-4s / V10-4B V10-4Bs / V10-4BP / V10-4P		●		●	●	●	
	6CV1 / 6CV1s / 6CV1P		●		●	●	●	
Pencil	CW2s / CW5s / CW5							
Biplane	65EB10EA		●		●	●	●	
	CB10-4 / CB10-4P / CB10-4A / CB10-4E		●		●	●	●	
	6LB7 / 6LB7s / 6LB7P / 6LB7E		●		●	●	●	

TABLE B-4 4D PROBES

	Oxivir™ TM Tb	PI-SPRAY-II	Surfa'safe	TRANSEPTIC	PROTEX™ TM DISINFECTANT SPRAY	Tristel Solo	IODOCLEAN
4CD4 / 4CD4A / 4CD4s							
D7-2 / D7-2E / D7-2s / SD8-1E	●	●	●	●	●	●	
D6-2 / D6-2P / D6-2A / D6-2E	●	●	●	●	●	●	
D6-2NE							
D8-2U		●					●
D8-4U		●					
DE10-3E / DE10-3U		●					●
DE11-3U / DE11-3P DE11-3s / DE11-3E							

Appendix C - Solution Disinfectants

TABLE C-1 CONVEX PROBES

	CIDEX OPA	Cidex Activated Glutaraldehyde Solution	MetriZyme	Minicare® Cold Sterilant	Ster-Bac	TrophonSonex-HL*	Triacid-N	Revital-Ox™ Resert High Level Disinfectant	ggigasept®PAA concentrate	ggigasept®FF(neu)	DESCOTON extra	ANIOXYDE 1000	SALVANIOS pH7	SALVANIOS pH10	CIDEX PLUS	Milton
C5-1s / C5-1E / C5-1U	●				●		●		●	●	●	●	●	●		
C5-2 / C5-2s / C5-2E	●				●		●		●	●	●	●	●	●		
C6-2E	●				●		●		●	●	●	●	●	●		
C6-2Gs / C6-2GE / C6-2GU	●			●			●		●	●	●	●	●	●		
C7-3E	●	●	●	●	●	●	●		●	●	●	●	●	●		
C11-3E / C11-3s / C11-3U	●	●	●	●	●	●	●		●	●	●	●	●	●		
3C1 / 3C1s / 3C1p	●	●	●	●	●	●	●		●	●	●	●	●	●		
3C5 / 3C5s / 3C5A / 3C5P	●	●	●	●	●	●	●		●	●	●	●	●	●		
6C2 / 6C2P / 6C2s	●	●	●	●	●	●	●		●	●	●	●	●	●		
35C20EA / 35C50EA 35C50EB / 35C50P	●	●	●	●	●	●	●		●	●	●	●	●	●		
65C15EAV / 65C15EA	●	●	●	●	●	●	●		●	●	●	●	●	●		
SC5-1U / SC5-1E	●															
SC6-1U / SC6-1s	●				●				●			●	●			
SC8-2U	●		●							●					●	●
65EC10EA / 65EC10EB 65EC10EC	●	●	●	●	●	●	●									
65EL60EA	●	●	●	●	●		●									
65EC10ED	●	●			●	●	●	●	●	●	●	●	●			

* TrophonSonex-HL (Used with Trophon EPR Ultrasound Probe Disinfector)

TABLE C-3 OTHER TYPES OF PROBES

		CIDEX OPA	Cidex Activated Glutaraldehyde Solution	MetriZyme	MinnCare® Cold Sterilant	Ster-Bac	TrophonSonex-HL *	Triacid-N	Revital-Ox™ Resert High Level Disinfectant	ggigasept®PAA concentrate	ggigasept®FF(neu)	DESCOTON extra	ANIOXYDE 1000	SALVANIOS pH7	SALVANIOS pH10
Phased	P4-2 / P4-2s / P4-2E / P4-2NE / P4-2Ns	●	●	●	●	●	●	●		●	●	●	●	●	●
	P7-3 / P7-3s / P7-3E / P7-3P / P7-3U	●		●											
	P10-4E / P10-4s / P10-4U	●	●	●	●	●	●	●		●	●	●	●	●	●
	P12-4 / P12-4s	●		●	●	●	●	●							●
	2P2 / 2P2s / 2P2P	●	●	●	●	●	●	●		●	●	●	●	●	●
	SP5-1U / SP5-1s / SP5-1E	●								●			●	●	
Endo-cavity	V11-3 / V11-3BE / V11-3B V11-3WE / V11-3Ws / V11-3E	●		●	●	●	●	●			●		●	●	●
	V11-3HU / V11-3Hs	●			●		●	●		●	●	●	●	●	
	V10-4 / 10-4s / V10-4B V10-4Bs / V10-4BP / V10-4P	●				●	●	●	●	●	●	●	●	●	●
	6CV1 / 6CV1s / 6CV1P	●				●	●	●	●	●	●	●	●	●	●
Pencil	CW2s / CW5s / CW5	●			●	●		●							●
Biplane	65EB10EA	●		●	●	●		●							●
	CB10-4 / CB10-4P / CB10-4A / CB10-4E	●		●	●	●		●							●
	6LB7 / 6LB7s / 6LB7P / 6LB7E	●		●	●	●	●	●							●

* TrophonSonex-HL (Used with Trophon EPR Ultrasound Probe Disinfectant)

TABLE C-4 4D PROBES

	CIDEX OPA	Cidex Activated Glutaraldehyde Solution	Cidex	Cidex Plus	MetriZyme	Minnicare® Cold Sterilant	Ster-Bac	TrophonSonex-HL*	Triacid-N	Revital-Ox™ Resert High Level Disinfectant	ggigasept®PAA concentrate	ggigasept®FF(neu)	Gigasept AF	DESCOTON extra	ANIOXYDE 1000	SALVANIOS pH7	Osvan	Neojodin	Milton	hibitane	Sterihyde	Cidezyme
4CD4 / 4CD4A / 4CD4s	●	●																				
D7-2 / D7-2E / D7-2s / SD8-1E	●	●			●	●	●	●	●						●	●						
D6-2 / D6-2P / D6-2A / D6-2E	●	●			●	●	●	●	●						●	●						
D6-2NE	●				●												●	●	●	●	●	●
D8-2U	●		●																			
D8-4U	●		●									●										
DE10-3E / DE10-3U	●		●	●				●					●									
DE11-3U / DE11-3P DE11-3s / DE11-3E	●					●		●	●		●	●		●	●	●						

* TrophonSonex-HL (Used with Trophon EPR Ultrasound Probe Disinfector)

Appendix D - Gels and Powder Disinfectants (4D probe only)

TABLE D-1 CONVEX PROBES

	Gel			Powder	
	Aquasonics 100	Sonogel	Scan	Rely+On PeraSafe	PeraSafe
4CD4 / 4CD4A / 4CD4s					
D7-2 / D7-2E / D7-2s / SD8-1E					
D6-2 / D6-2P / D6-2A / D6-2E					
D6-2NE					
D8-2U	●	●	●		●
D8-4U	●	●	●		
DE10-3E / DE10-3U	●	●	●	●	
DE11-3U / DE11-3P DE11-3s / DE11-3E					

NOTE: Please select the proper disinfectant for the probe of the Diagnostic Ultrasound System. The content of this document shall prevail in case of other new editions.

NOTE: Refer to local regulations for the use of each disinfectant. For use of each disinfectant, please refer to the manufacturer's instructions

Release date: September 17

Active Ingredients of the Disinfectants

Ster-Bac/mikrozid® Sensitive Wipes: Quaternary Ammoniums

UNIVERSAL WIPES: didecyldimethylammonium chloride 1.4mg/g, polyhexamethylene biguanide hydrochloride 0.96mg/g

PI-SPRAY-II: Octyl decyl dimethyl ammonium chloride, Dioctyl dimethyl ammonium chloride, Didecyl dimethyl ammonium chloride, Benzalkonium chloride

MetriZyme/Cidezyme/Alkazyme/Klnezyme: Proteinase subtilisin

Tristel Rinse Wipes: deionized water

Cidex OPA: 0.55% Ortho-phthlaldehyde

Oxivir™/MC Tb: 0.5% hydrogen peroxide

Tristel Surface Wipes/Tristel Trio Wipes System: chlorine dioxide

Tristel Solo: polyhexamethylbiguanide

Tristel Pre-Clean Wipes: enzymatic detergent

ANIOXYDE 1000: 3% Hydrogen Peroxide

Wip'Anios premium: didecyldimethylammonium chloride 1.4mg/g, polyhexamethylene biguanide hydrochloride 0.96mg/g

Cidex Activated Glutaraldehyde Solution: glutaraldehyde

TRANSEPTIC: isopropyl alcohol, chlorhexidine gluconate

gigasept®FF(neu): 0.11g succindialdehyde; 0.3g dimethoxytetrahydrofuran; < 5% anionic surfactant; non-ionic surfactants; anti-corrosion compounds; fragrance

gigasept®PAA concentrate: peracetic acid (5%); hydrogen peroxide: acetic acid; potassium hydroxide: corrosion inhibitor

Sani-Cloth AF3: Quaternary ammonium compounds, C12-18-alkyl [(ethylphenyl) methyl] dimethyl, chlorides, Benzyl-C12-18-alkyldimethyl ammonium chlorides

MetriSponge: Water and non-hazardous ingredients Mixture, Propylene glycol, Nonionic Surfactants Proprietary, Fragrance Oil Proprietary, Proteinase subtilisin, Octamethylcyclotetrasiloxane

Protex Ultra Wipes: Quaternary ammonium compounds di-C8-10-alkyldimethyl, chlorides, Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides, Water, Proprietary Ingredients

ultrasound probe cleaning wipes: Poly-prenyl acetate, propylene glycol

DI Water: water **Ethanol 75%:** Alcohol

Bleach 5.25% (10% Solution): Sodium Hypochlorite

Sporox II: Hydrogen Peroxide

PeraSafe: Disodium carbonate, citric acid, sodium carbonate

Sani Cloth Active: Didecyldimethyl ammonium chloride 0.450%w/w

Cidex Plus: glutaraldehyde **Cidex:** alkaline glutaraldehyde

Sonogel: carbomer, polyacrylat **SteriHyde:** Glutaraldehyde

Osvan: Ammonia benzalkonium **Neojodin:** povidone-iodine

Milton: sodium hypochlorite **Hibitane:** hlorthexidine

Minnicare® Cold Sterilant: 22% Hydrogen Peroxide, 4.5% Peroxyacetic Acid

Liquinox: Sodium sulfonate, Tripotassium

Steranios: 2% glutaraldehyde

Protex™ Disinfectant Spray/Protex™ Disinfectant Wipes: octyl decyl dimethyl ammonium chloride; dioctyl dimethyl ammonium chloride; didecyl dimethyl ammonium chloride; dimethyl benzyl ammonium chloride

Triacid-N: N-Dodecylpropan-1,3-diamin; propan-2-ol; isotridecanol, ethoxylated; non-ionic detergent

Surfa'safe: didecyldimethylammonium chloride 1.4mg/g, polyhexamethylene biguanide hydrochloride 0.96mg/g

Revital-Ox™ Resert High Level Disinfectant/TrophonSonex-HL: hydrogen peroxide

DI Water: water

Bleach 5.25% (10% Solution): Sodium Hypochlorite

Ethanol 75%: Alcohol

Sporox II: Hydrogen Peroxide

DESCOTON extra: 12% glutaral

IODOCLEAN: sodium thiosulfate and excipients

SALVANIOS pH7/SALVANIOS pH10: Guanidinium acetate, ammonium propionate, excipients

Sani-Cloth® Plus: n-Alkyl dimethyl benzyl ammonium chloride n-Alkyl ethylbenzyl ammonium chloride

SONO™ ULTRASOUND WIPES: octyl decyl dimethyl ammonium chloride; dioctyl dimethyl ammonium chloride; didecyl dimethyl ammonium chloride; dimethyl benzyl ammonium chloride

CaviWipes: isopropanol, ethylene glycol monobutyl ether (2-butoxyethanol), diisobutylphenoxyethoxyethyl dimethyl benzyl ammonium chloride, water

CaviWipes 1: isopropanol, ethanol, ethylene glycol monobutyl ether (2-butoxyethanol), didecyldimethylammonium chloride, water

CaviCide: isopropanol, ethanol, ethylene glycol monobutyl ether (2-butoxyethanol), diisobutylphenoxyethoxyethyl dimethyl benzyl ammonium chloride, water

CLEANISEPT® WIPES: 0.25g didecyldimethylammoniumchloride 0.5g quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl-, chlorides

Minnicare® Cold Sterilant: 22% Hydrogen Peroxide, 4.5% Peroxyacetic Acid

mikrozid®AF Wipes Jumbo: 25% ethanol; 35% propan-1-ol

Nu-Cidex: 0.35%peracetic acid

**Mindray North America
Innovation Center**

2100 Gold Street
San Jose, CA 95002

Tel: 800.288.2121 Support: 877.913.9663 www.mindray.com

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