

Technical Report

To : To Whom it may concern

From : GiSeok Kim (SHS US INT IM&TR TRE-SUSKO MPE)

Date : Jun 23rd , 2022

Title : Technical report_NDK 9VC2, 9VE4 Transducer disinfection compatibility test

■ Executive Summary:

9VC2, 9VE4 transducer material compatibility testing demonstrated that there are no deleterious effects on the transducers. Testing was performed with extended exposure testing and showed that gigasept FF (new) did not harm the transducers. Based on these test results, 9VC2 and 9VE4 transducer are compatible with gigasept FF (new).

■ Scope :

- Test protocol: 4DVC Transducer Verification Plan (P/N 11575443-EFT-001-01)
4DVE Transducer Verification Plan (P/N 11575444-EFT-001-01)
- Pass/Fail Criteria:
 - 1) Transducer shall pass safety testing of Hipot and Leakage Current Test
 - Hipot (4000 V [ac rms] / 50Hz 50 seconds): ≤ 2 mA
 - Leakage Current (264 V [AC rms] / 60Hz): ≤ 0.05 mA (50 μ A)
 - 2) Mechanical damage to the plastic housing such as cracking, etc.







● Transducer information







No	Transducer	P/N	S/N	Tested disinfectants	Type
1	9VC2 (4DVC)	11575443	14-002	gigasept FF (new)	Liquid
2	9VE4 (4DVE)	11575444	21-002		

● Test results

Transducer	section	Before soaking	After soaking	Test result
9VC2	Hipot teest	0.209 mA	0.212 mA	Pass
	Leakage test	11.92 μ A	12.34 μ A	Pass
9VE4	Hipot teest	0.323 mA	0.33 mA	Pass
	Leakage test	19.45 μ A	19.68 μ A	Pass

Visual inspection: No visual defects were found in all samples.

XDCR	Test	Head assembly	Handle & Strain relief	Cable	Judge
9VC2	Before				No defect
	After				

XDCR	Test	Head assembly	Handle & Strain relief	Cable	Judge
9VE4	Before				No defect
	After				

■ Conclusion:

Based on these test results, 9VC2 and 9VE4 transducer are compatible with gigasept FF (new).

■ Appendix

1) 9VC2 Test results



220523.PLM_Hipot 220603.PLM_Hipot
.11575443.14-002.0.115754443.14-002.

2) 9VE4 Test results



220523.PLM_Hipot 220523.PLM_Hipot 220603.PLM_Hipot 220603.PLM_Hipot
.11575444.21-002.2.11575444.21-002.1.11575444.21-002.2.11575444.21-002.1