

Table S1: Results of the biocides susceptibility testing of *E. coli* isolated from pigs

| Minimal inhibitory concentration (MIC) | | | | | | | | | | | |
|--|-----------|-----------------------------|----------|-----------|----------|---------|--------|--------|--------|--------|--------|
| RSMB ¹ | | BENZALKONIUM CHLORIDE (BAC) | | | | | | | | | |
| ≥0.004% | 0.000015% | 0.00003% | 0.00006% | 0.000125% | 0.00025% | 0.0005% | 0.001% | 0.002% | 0.004% | 0.008% | 0.016% |
| No of isolates | | | | | | 2 | 59 | 43 | | | |
| RSMB | | CHLORHEXIDINE (CHX) | | | | | | | | | |
| ≥0.00025% | 0.000015% | 0.00003% | 0.00006% | 0.000125% | 0.00025% | 0.0005% | 0.001% | 0.002% | | | |
| No of isolates | | 12 | 28 | 13 | 23 | 18 | 9 | 1 | | | |
| RSMB | | GLUTARDIALDEHYDE (GLU) | | | | | | | | | |
| ≥0.5% | 0.0075% | 0.015% | 0.03% | 0.06% | 0.125% | 0.25% | 0.5% | 1% | | | |
| No of isolates | | | 4 | 49 | 28 | 21 | 2 | | | | |
| RSMB | | ISOPROPANOL (ISO) | | | | | | | | | |
| ≥10% | <1% | 1% | 2% | 4% | 6% | 8% | 10% | 12% | 14% | | |
| No of isolates | | 1 | 6 | 26 | 54 | 16 | 1 | | | | |

Abbreviations: ¹Reduced susceptibility MIC breakpoint based on the established protocol of Schug et al. [21]

Table S2: Established MIC values of investigated biocides on reference strains

| | BAC ⁵ % | | CHX ⁶ (%) | | ISO ⁷ (%) | | GLU ⁸ (%) | |
|--|---|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|
| | "Acceptable ranges – 24h" ^{**} [22] | Established MIC | "Acceptable ranges – 24h" [22] | Established MIC | "Acceptable ranges – 24h" [22] | Established MIC | "Acceptable ranges – 24h" [22] | Established MIC |
| <i>S.</i> ¹ <i>aureus</i> ATCC ⁹ 6538 | 0.00006-0.00025 | 0.0003 | 0.00003-0.000125 | 0.00003 | 4-10 | 8 | 0.03-0.25 | 0.06 |
| <i>E.</i> ² <i>hirae</i> ATCC 10541 | 0.000125-0.0005 | 0.0006 | 0.00003-0.00025 | 0.00006 | 4-10 | 8 | 0.06-0.25 | 0.125 |
| <i>E.</i> ³ <i>coli</i> ATCC 10536 | 0.0005-0.002 | 0.0001 | 0.000016-0.000125 | 0.00006 | 2-8 | 4 | 0.03-0.25 | 0.125 |
| <i>P.</i> ⁴ <i>aeruginosa</i> ATCC 15442 | 0.002-0.0016 | 0.004 | 0.001-0.004 | 0.00025 | 1-6 | 4 | 0.03-0.125 | 0.125 |

Abbreviations: ¹ *S.*, *Staphylococcus*, ² *E.*, *Enterococcus*, ³ *E.*, *Escherichia*, ⁴ *P.*, *Pseudomonas*, ⁵ BAC, Benzalkonium Chloride, ⁶ CHX, Chlorhexidine, ⁷ ISO, Isopropanol, ⁸ GLU, Glutardialdehyde, ⁹ ATCC, American Type Culture Collection

^{*} based on the most common values +/- one dilution steps obtained for the different subgroups after incubation of 24 h.