

DS-1 ANTI-BACTERIAL EFFECTS TEST

Test method: Agar plate dilution method

Sample bacteria:

1. Staphylococcus aureus
2. Sarcina
3. Streptococcus pneumoniae
4. Enterococcus faecalis
5. Bacillus subtilis
6. E. coli
7. Shigella dysenteriae (subgroup A)
8. Pseudomonas aeruginosa

–: No bacteria growth was found.

±: Partial bacteria growth was found.

+: Bacteria growth was found.

	1	2	3	4	5	6	7	8
x 400	–	–	–	–	–	–	–	–
x 800	–	–	–		–	–	–	–
x 1,600	–	–	–		–	–	–	–
x 3,200	–	–			–			–
x 4,000		–			–			–
x 6,400		–			–			–

x 400 = 0.25% solution = 2.5 g of DS-1 per 1 L of water

DS-1 DISINFECTING EFFECTS TEST

(Sterilization test using E. coli bacteria)

Performed according to health inspection standards produced by the Ministry for Health, Labour and Welfare.

–: No bacteria growth was found. ±: Partial bacteria growth was found.

+: Bacteria growth was found.

(1) Test temperature 20°C

Dilution \ Test time	2.5 min	5 min	10 min	15 min
2% solution (x 50 dilution)	–	–	–	–
1% solution (x 100 dilution)	+	–	–	–
0.5% solution (x 200 dilution)	+	+	–	–
0.25% solution (x 400 dilution)	+	+	–	–
0.125% solution (x 800 dilution)	+	+	+	–

(2) Test temperature 40°C

Dilution \ Test time	2.5 min	5 min	10 min	15 min
2% solution (x 50 dilution)	–	–	–	–
1% solution (x 100 dilution)	+	–	–	–
0.5% solution (x 200 dilution)	+	–	–	–
0.25% solution (x 400 dilution)	+	–	–	–
0.125% solution (x 800 dilution)	+	–	–	–

(3) Test temperature 60°C

Dilution \ Test time	2.5 min	5 min	10 min	15 min
2% solution (x 50 dilution)	–	–	–	–
1% solution (x 100 dilution)	–	–	–	–
0.5% solution (x 200 dilution)	–	–	–	–
0.25% solution (x 400 dilution)	–	–	–	–
0.10% solution (x 1000 dilution)	–	–	–	–