

this salt solution was poured immediately after inoculating, and another towards the close of the poison experiments.

Culture No. 17; temp. 22° C. Control: 7128, 8173 col.

Staph. in poison

5 6 10 11.5 15 16 20 21 30 40 50 67 min.

0.80% phenol

8210 — 7191 — 6084 — 2864 734 44 0 0 col.

Equivalent

7058 — 5728 — 1819 — 2149 — 742 0 0 0 col.

Culture No. 18; temp. 20° C. Control: 8546 after 3 min., 10882 after 5 min.

Staph. in poison 5 10 15 20 30 40 55 60 70 min.

0.80% phenol 10426 8400 6428 3755 350 6 0 — col.

Equivalent 10927 10692 6199 5543 2864 293 11 8 3 col.

Culture No. 29; temp. 24-27° C. Control: 10500 col.

Staph. in poison 5 10 15 20 30 40 55 70 min.

0.80% phenol 3309 309 1 0 0 0 0 0 col.

Equivalent 2546 55 38 4 0 0 0 0 col.

Towards culture No. 17, the phenol and its equivalent proved equally toxic; but towards Nos. 18 and 29, the "equivalent" was less toxic than the pure phenol solution.

Comparison of 0.70% Phenol with Its Chemical Equivalent

The equivalent contained 0.63 percent phenol and 2.0 percent salt.

Culture No. 14; temp. 21° C. Control: 7828, 0555, 6491 col.

Staph. in poison

10.5 15 23 24.5 33 35 44 45 (11 more, to 98) min.

0.70% phenol

3384 — 674 — 142 3 0 col.

Equivalent

2262 — 970 82 — 3 0 col.

The following experiment was carried out at the same time, with the same culture and controls, to compare the effect of 0.6 and 0.7 percent phenol.

Staph. in

poison 10 22.5 31 42 52.5 62.5 72 5 80 86.5 96.5 min.

0.60% ph. 5409 4975 3134 3039 2095 914 419 41 25 13 col.