OxyChem®

Basic Chemicals

# Sodium Chlorite
# CT Value Ranges for Inactivation of Various Microorganisms

Table 1 is a summary of contact time (CT) value ranges for the inactivation of various microorganisms by different disinfectants. This table is a compilation of reported CT values taken from various published sources.

CT is defined as disinfectant contact time, the mathematical product of C x T, where C is the residual disinfectant concentration measured in mg/L, and T is the corresponding contact time measured in minutes.

All CT values are for 99% inactivation at 5$^{o}$C except for *Giardia lamblia* and *Cryptosporidium parvum.*

**Further Information**

More detailed information on sodium chlorite is available on request through the OxyChem Technical Service Department. Call or write to:

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**Table 1**

| Microorganism | Disinfectant | | | |
|---|---|---|---|---|
| | **Free Chlorine pH 6 to 7** | **Preformed Chloramine pH 8 to 9** | **Chlorine Dioxide pH 6 to 7** | **Ozone pH 6 to 7** |
| *Escherichia Coli* | 0.034 - 0.05 | 95 - 180 | 0.4 - 0.75 | 0.02 |
| Polio 1 | 1.1 - 2.5 | 768 - 3740 | 0.2 - 6.7 | 0.1 - 0.2 |
| Rotavirus | 0.01 - 0.05 | 3806 - 6476 | 0.2 - 2.1 | 0.006 - 0.06 |
| *Giardia lamblia* cysts | 47 > 150 | 2200(a) | 26(a) | 0.5 - 0.6 |
| *Giardia muris* cysts | 30 - 630 | 1400.00 | 7.2 - 18.5 | 1.8 - 2.0 |
| *Cryptosporidium parvum* | 7200(b) | 7200(c) | 78(c) | 5 - 10(b) |

(a) Values for 99% inactivation at pH 6-9.

(b) 99% inactivation at pH 7 and 25$^{o}$C

(c) 90% inactivation at pH 7 and 25$^{o}$C

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