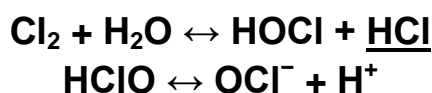


## Efficacité de l'acide hypochloreux (HClO)

- L'activité inhibitrice ou létale dépend de la quantité de chlore libre disponible (comme acide hypochloreux HClO) dans l'eau qui entre en contact avec les cellules microbiennes.
- La dissociation de HClO dépend du pH, de la température et de la quantité de chlore consommé au contact de la matière organique.
- Selon le pH de l'eau de source, l'acide hypochloreux subira une réaction complète ou partielle dissociation comme suit:

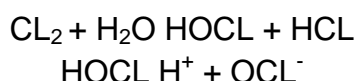


L'importance de cette dissociation est que l'acide hypochloreux est beaucoup plus agent germicide efficace que l'ion hypochlorite.

pH	0°C	5°C	10°C	15°C	20°C	25°C	30°C
5.0	99.85	99.82	99.80	99.79	99.74	99.71	99.68
5.5	99.53	99.45	99.36	99.27	99.18	99.09	99.00
6.0	98.53	98.28	98.00	97.73	97.45	97.18	96.92
6.1	98.16	97.84	97.50	97.16	96.82	96.48	96.15
6.2	97.69	97.29	96.88	96.45	96.02	95.60	95.20
6.3	97.11	96.62	96.10	95.57	95.05	94.53	94.04
6.4	96.39	95.78	95.14	94.49	93.84	93.21	92.61
6.5	95.50	94.75	93.96	93.16	92.37	91.60	90.87
6.6	94.40	93.47	92.51	91.54	90.58	89.65	88.78
6.7	93.05	91.92	90.75	89.58	88.43	87.32	86.27
6.8	91.41	90.03	88.63	87.23	85.85	84.54	83.31
6.9	89.42	87.77	86.10	84.43	82.82	81.29	79.86
7.0	87.04	85.08	83.10	81.16	79.29	77.53	75.90
7.5	67.99	64.33	60.88	57.68	54.77	52.18	49.90
8.0	40.18	36.32	32.98	30.12	27.69	25.65	23.95
8.5	17.52	15.28	13.46	11.99	10.80	9.84	9.06
9.0	6.29	5.39	4.69	4.13	3.69	3.33	3.05
10.0	0.67	0.57	0.49	0.43	0.38	0.34	0.31

## Efficacy of Hypochlorous Acid

- Inhibitory or lethal activity depends on the amount of Free Available Chlorine (as Hypochlorous Acid, or HOCL) in the water that comes in contact with microbial cells.
- The dissociation of HOCL depends on pH, temperature, and the amount of chlorine that is consumed on contact with the organic matter.
- Depending on the pH of the source water, the Hypochlorous acid will undergo complete or partial dissociation as follows:



The significance of this disassociation is that Hypochlorous acid is a much more effective germicidal agent than the Hypochlorite ion.