

NR 810.50 CT table for giardia when using free chlorine at 15°C.

CT Values for Inactivation of Giardia Cysts by Free Chlorine
15°C (59°F)

Chlorine Concentration (mg/L)	pH ≤ 6						pH = 6.5						pH = 7.0						pH = 7.5														
	0.5		1		2		2.5		3		0.5		1		1.5		2		2.5		3		0.5		1		1.5		2		2.5		3
≤0.4	8	16	25	33	41	49	10	20	30	39	49	59	12	23	35	47	58	70	14	28	42	55	69	83									
0.6	8	17	25	33	42	50	10	20	30	40	50	60	12	24	36	48	60	72	14	29	43	57	72	86									
0.8	9	17	26	35	43	52	10	20	31	41	51	61	12	24	37	49	61	73	15	29	44	59	73	88									
1	9	18	27	35	44	53	11	21	32	42	53	63	13	25	38	50	63	75	15	30	45	60	75	90									
1.2	9	18	27	36	45	54	11	21	32	43	53	64	13	25	38	51	63	76	15	31	46	61	77	92									
1.4	9	18	28	37	46	55	11	22	33	43	54	65	13	26	39	52	65	78	16	31	47	63	78	94									
1.6	9	19	28	37	47	56	11	22	33	44	55	66	13	26	40	53	66	79	16	32	48	64	80	96									
1.8	10	19	29	38	48	57	11	23	34	45	57	68	14	27	41	54	68	81	16	33	49	65	82	98									
2	10	19	29	39	48	58	12	23	35	46	58	69	14	28	42	55	69	83	17	33	50	67	83	100									
2.2	10	20	30	39	49	59	12	23	35	47	58	70	14	28	43	57	71	85	17	34	51	68	85	102									
2.4	10	20	30	40	50	60	12	24	36	48	60	72	14	29	43	57	72	86	18	35	53	70	88	105									
2.6	10	20	31	41	51	61	12	24	37	49	61	73	15	29	44	59	73	88	18	36	54	71	89	107									
2.8	10	21	31	41	52	62	12	25	37	49	62	74	15	30	45	59	74	89	18	36	55	73	91	109									
3	11	21	32	42	53	63	13	25	38	51	63	76	15	30	46	61	76	91	19	37	56	74	93	111									

Chlorine Concentration (mg/L)	pH = 8.0						pH = 8.5						pH ≤ 9.0																				
	0.5		1		2		2.5		3		0.5		1		1.5		2		2.5		3		0.5		1		1.5		2		2.5		3
≤0.4	17	33	50	66	83	99	20	39	59	79	98	118	23	47	70	93	117	140															
0.6	17	34	51	68	85	102	20	41	61	81	102	122	24	49	73	97	122	146															
0.8	18	35	53	70	88	105	21	42	63	84	105	126	25	50	76	101	126	151															
1	18	36	54	72	90	108	22	43	65	87	108	130	26	52	78	104	130	156															
1.2	19	37	56	74	93	111	22	45	67	89	112	134	27	53	80	107	133	160															
1.4	19	38	57	76	95	114	23	46	69	91	114	137	28	55	83	110	138	165															
1.6	19	39	58	77	97	116	24	47	71	94	118	141	28	56	85	113	141	169															
1.8	20	40	60	79	99	119	24	48	72	96	120	144	29	58	87	115	144	173															
2	20	41	61	81	102	122	25	49	74	98	123	147	30	59	89	118	148	177															
2.2	21	41	62	83	103	124	25	50	75	100	125	150	30	60	91	121	151	181															
2.4	21	42	64	85	106	127	26	51	77	102	128	153	31	61	92	123	153	184															
2.6	22	43	65	86	108	129	26	52	78	104	130	156	31	63	94	125	157	188															
2.8	22	44	66	88	110	132	27	53	80	106	133	159	32	64	96	127	159	191															
3	22	45	67	89	112	134	27	54	81	108	135	162	33	65	98	130	163	195															

Note:

CT values between the indicated pH values may be determined by linear interpolation.

CT values between the indicated temperatures of different tables may be determined by linear interpolation.

If no interpolation is used, use the CT value at the lower temperature and at the higher pH.

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