

# Rite in the Rain®

— DEFYING MOTHER NATURE —

## COMMERCIAL POOL WATER CHEMISTRY GUIDELINES

NOTE: These chemical parameters are for reference only and do not supercede local or state codes and regulations. For state Commercial Pool guidelines call your local Health Department.

PARAMETER	ABBR.	MIN	IDEAL	MAX
Free Chlorine (ppm or mg/L)	FAC	1.0	2.0 - 4.0	5.0
Total Chlorine (ppm or mg/L)	TC	1.0	2.0 - 4.0	5.2
Combined Chlorine* (ppm or mg/L)	CC	0	0	.2
Total Bromine (ppm or mg/L)	TB	2.0	4.0 - 6.0	10.0
PHMB (ppm or mg/L)	PHMB	30	30 - 50	50
pH	pH	7.2	7.4 - 7.6	7.8
Total Alkalinity (ppm or mg/L)	TA	60	80 - 120	180
Calcium Hardness (ppm or mg/L)	CH	150	200 - 400	1,000
Cyanuric Acid (ppm or mg/L)	CYA	0	30-50	CHECK LOCAL CODES

## COMMERCIAL SPA WATER CHEMISTRY GUIDELINES

NOTE: These chemical parameters are for reference only and do not supercede local or state codes and regulations. For state Commercial Spa guidelines call your local Health Department.

PARAMETER	ABBR.	MIN	IDEAL	MAX
Free Chlorine (ppm or mg/L)	FAC	2.0	3.0 - 5.0	10.0
Total Chlorine (ppm or mg/L)	TC	2.0	3.0 - 5.0	10.5
Combined Chlorine* (ppm or mg/L)	CC	0	0	.5
Total Bromine (ppm or mg/L)	TB	2.0	4.0 - 6.0	10.0
PHMB (ppm or mg/L)	PHMB	30	30 - 50	50
pH	pH	7.2	7.4 - 7.6	7.8
Total Alkalinity (ppm or mg/L)	TA	60	80 - 120	180
Calcium Hardness (ppm or mg/L)	CH	100	150 - 250	800
Cyanuric Acid (ppm or mg/L)	CYA	0	30-50	CHECK LOCAL CODES

Additional Readings to Consider: • SALT • BACTERIA • SATURATION INDEX • OZONE • TDS • TURNOVER • CYANURIC ACID (CYA)  
 \*Combined Chlorine (CC) results found by subtracting Free Chlorine (FAC) from Total Chlorine (TC).

### DOSAGES TO TREAT: 10,000 GALLONS

### DOSAGES TO TREAT: 40,000 LITERS

CHEMICAL	DESIRED CHANGE			DESIRED CHANGE		
	10 ppm	30 ppm	50 ppm	10 mg/L	30 mg/L	50 mg/L
<b>Increase Chlorine</b>						
Chlorine Gas	1.3 oz	6.7 oz	13 oz	40 g	200 g	390 g
Calcium Hypochlorite (67%)*	2 oz	10 oz	1.3 lb	63 g	315 g	630 g
Sodium Hypochlorite (12%)	10.7 fl.oz.	1.7 qts	3.3 qts	330 mL	1.36 L	3.3 L
Lithium Hypochlorite	3.8 oz	1.2 lbs	2.4 lbs	110 g	570 g	1.1 kg
Dichlor (62%)	2.1 oz	10.75 oz	1.3 lbs	65 g	320 g	650 g
Dichlor (56%)	2.4 oz	12 oz	1.4 lbs	72 g	360 g	720 g
Trichlor	1.5 oz	7.5 oz	14 oz	44 g	220 g	440 g
<b>Increase Total Alkalinity</b>						
Sodium Carbonate	14 oz	4.2 lbs	7.0 lbs	670 g	2.0 kg	3.4 kg
Sodium Bicarbonate	1.4 lbs	2.6 lbs	4.4 lbs	400 g	1.2 kg	2.0 kg
Sodium Sesquicarbonate	1.25 lbs	3.75 lbs	6.25 lbs	600 g	1.8 kg	3.0 kg
<b>Decrease Total Alkalinity</b>						
Muriatic Acid (31.4%)	26 fl.oz.	2.4 qts	1 gal	800 ml	2.4 L	4.0 L
Sodium Bisulfate	2.1 lbs	6.4 lbs	10.5 lbs	1.03 kg	3.1 kg	5.15 kg
<b>Increase Calcium Hardness</b>						
Calcium Chloride (100%)	0.9 lbs	2.8 lbs	4.6 lbs	402 g	1.2 kg	2.0 kg
Calcium Chloride (77%)	1.2 lbs	3.6 lbs	6.0 lbs	575 g	1.7 kg	2.9 kg
<b>Increase Stabilizer</b>						
Cyanuric Acid	13 oz	2.5 lbs	4.1 lbs	400 g	1.2 kg	2 kg
<b>Neutralize Chlorine</b>						
Sodium Thiosulfate	2.6 oz	13 oz	26 oz	79 g	395 g	790 g
Sodium Sulfite	2.4 oz	12 oz	1.5 lbs	71 g	356 g	711 g

Chemical amounts have been rounded off for convenience. Always follow the instructions on the manufacturer's label for exact dosage amounts.  
 \*Other calcium hypochlorite products are available from 47% to 78%.



ALL-WEATHER  
**COMMERCIAL POOL & SPA LOG**  
Nº 425-MX

\_\_\_\_/\_\_\_\_/\_\_\_\_ - \_\_\_\_/\_\_\_\_/\_\_\_\_  
(BEGINNING DATE) (ENDING DATE)

Facility: \_\_\_\_\_ Pool/Spa: \_\_\_\_\_

Facility Contact: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_

**POOL MAINTENANCE INFORMATION**

Sanitizer Type: \_\_\_\_\_

Other Chemicals: \_\_\_\_\_

MSDS Forms Location: \_\_\_\_\_

Pool Operator: \_\_\_\_\_ CPO License #: \_\_\_\_\_

Phone 1: \_\_\_\_\_ Phone 2: \_\_\_\_\_ Fax: \_\_\_\_\_

Service Company: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_ Website: \_\_\_\_\_

Health Dept. Inspector: \_\_\_\_\_ Phone: \_\_\_\_\_

Fire Dept: \_\_\_\_\_ Police Dept: \_\_\_\_\_

**Additional Contacts:**

1. \_\_\_\_\_ Phone 1: \_\_\_\_\_ Phone 2: \_\_\_\_\_

2. \_\_\_\_\_ Phone 1: \_\_\_\_\_ Phone 2: \_\_\_\_\_



**SAMPLE**  
Page 1 Contact Info



