

# Water Chemistry Guidelines

## The Balance

| Parameter                    | Min.  | Ideal               | Max.                   | Pool Type         |
|------------------------------|-------|---------------------|------------------------|-------------------|
| pH                           | 7.2   | 7.4 - 7.6           | 7.8                    | All Types         |
| Total Alkalinity (ppm)       | 60    | 80 - 100*           | 180                    | All Types         |
|                              |       | 100 - 120**         |                        |                   |
| Calcium Hardness             | 150   | 200 - 400           | 1,000                  | Pools, Waterparks |
|                              | 100   | 150 - 250           | 800                    | Spas              |
| Total Dissolved Solids (ppm) | NA    | NA                  | 1,500 over start-up*** | All Types         |
| Cyanuric Acid (ppm)          | 10    | 30 - 50             | 100                    | All Types         |
| Temperature                  | 78° F | 80.5° F             | 82° F                  | Competition Pools |
|                              | -     | -                   | 104° F                 | Spas              |
|                              | -     | Personal Preference | 104° F                 | Other Pools       |

\* For calcium hypochlorite, lithium hypochlorite, or sodium hypochlorite

\*\* For sodium dichlor, trichlor, chlorine gas, BCDMH

\*\*\* Start-up includes the TDS contribution of salt found in chlorine generating systems

## The Disinfectant

| Parameter           | Min. | Ideal     | Max. | Pool Type         |
|---------------------|------|-----------|------|-------------------|
| Free Chlorine (ppm) | 1.0  | 2.0 - 4.0 | 5.0  | Pools, Waterparks |
|                     | 2.0  | 3.0 - 5.0 | 10.0 | Spas              |
| Total Bromine (ppm) | 2.0  | 4.0 - 6.0 | 10.0 | All Types         |

## The Contaminants

| Contaminant             | Min. | Ideal | Max.       | Pool Type         |
|-------------------------|------|-------|------------|-------------------|
| Combined Chlorine (ppm) | 0    | 0     | 0.2        | Pools, Waterparks |
|                         | 0    | 0     | 0.5        | Spas              |
| Heavy Metals            | None | None  | None       | All Types         |
| Visible Algae           | None | None  | None       | All Types         |
| Bacteria                | None | None  | Local Code | All Types         |