

Spa Chemical Cheat Sheet

EZ Spa/ EZ Start

- Add this to **fresh water**. EZ Spa kills organic material, rids the water of metals and phosphates, and clarifies new water.

Spa Perfect

- Add as a **weekly maintenance**. Spa perfect is great for those who use **lotions/ wear makeup**. Cosmetics can, over time, **increase** the **enzyme level** in your spa, which can result in a **scum line/ film** that develops on the water.

pH

- Desired range: 7.2-7.8
- Purpose:
 - When balanced, allows **chlorine** to **work properly**
 - **Prevents corrosion** of metal elements in spa (pump/ motor/ heating element).
 - **Prevents** eye/ skin **discomfort**
- **Too high:**
 - Cloudy water
 - Scale formation
 - Eye/ skin discomfort
- **Too low:**
 - Corrosion of metal elements
 - Eye/ skin discomfort
 - **WARNING:** pH LEVELS THAT ARE TOO LOW/ HIGH CAN RUIN PUMPS, MOTORS, AND HEATERS. BE SURE TO MONITOR THIS LEVEL CAREFULLY.

Alkalinity

- Desired range: 80-120ppm
- Purpose:
 - **Prevents pH** from **fluctuating**
 - Can have same issues as pH will if out of range, they go together.
 - As **alkalinity increases**, **pH will increase**.
- **Too high:**
 - Cloudy water
 - Scale formation
- **Too low:**
 - See effects of low pH

Calcium (Hardness)

- Desired range: 200-400ppm
- Purpose:
 - Prevents eroding of metal elements in spa (pump/ motor/ heater).
 - Prevents eye/ skin discomfort
- Too high:
 - Scale formation
- Too low:
 - See effects of low pH
 - **WARNING:** CALCIUM LEVELS THAT ARE TOO LOW CAN RUIN PUMPS, MOTORS, AND HEATERS. BE SURE TO MONITOR THIS LEVEL CAREFULLY.

Sani Spa

- Desired range: 2-4ppm
- Purpose:
 - Keeps water clear and clean
 - Prevents eye/ skin discomfort
- Too high:
 - Eye/ skin discomfort
 - Bleaching of clothes
 - Discolors and dries out hair
- Too low:
 - Smelly/ cloudy/ dirty water
- How much to add:
 - **Tablets:** 1-3 tabs a week per 100 gallons
 - **Powder:** approximately 1 tablespoon every use OR every other day when not in daily use (per 200 gallons)

Spa Shock

- Purpose:
 - To oxidize and rid the spa water of non-filterable contaminants.
- Types of Shock:
 - **Spa Shock:**
 - Add 1 cap weekly
 - Non-chlorine shock

Chlorine Stabilizer (Cyanuric Acid)

- Desired range: 0
- Too high:
 - Once your stabilizer reaches a level of 140ppm, keep an eye out. Stabilizer is added in spas through Sani Spa, or through chlorine pucks.
 - **IMPORTANT:** ONCE STABILIZER IS TOO HIGH, THE ONLY WAY TO LOWER IT IS TO LOWER YOUR WATER LEVEL.

Metal Removers

- Purpose: **remove metals** from water
 - Metals such as copper and iron can get into water if water chemistry is not balanced. **See calcium and pH.**
 - **IMPORTANT:** CHLORINE LEVELS MUST BE ZERO BEFORE ADDING A METAL REMOVER.

Phosphate Treatments

- Desired range: 0-500ppm
- Purpose:
 - Phosphates are organic/ inorganic materials that exist in spas such as: lotions, hairspray, and makeup. A phosphate treatment will **remove phosphates**, to ensure your water stays clear.
 - Phosphates are also found at high levels from tap water from fresh water fills.
- When do I need to use a phosphate treatment?
 - If **water is balanced** (alkalinity, pH, calcium, and chlorine are within range), and your water is **still cloudy**, phosphates could be the cause.

Clarifiers

- Purpose: **increase** water **clarity**.
 - Clarifiers **coagulate** (clump together) **small particles** in your spa water that are too fine to be filtered out by your cartridge filter. **Coagulation increases the size of these particles** so they can get trapped in the filter, and therefore clarifies the water.

Foam Away

- Purpose: **Eliminates foam** from spa
- What causes foam buildup in spas?
 - Foam can accumulate if the spa's owner uses a lot of **phosphate** containing products, such as: Lotions, makeup, hair products.
 - When spa **water is old** (it is recommended to change water every 3-4 months), a buildup of old products can create a foam layer either on the top of the water or around the water line.

Bromine Concentrate/ Tablets

- Purpose: a **non-chlorine** alternative that **sanitizes** the spa water
- How much to add:
 - **Tablets:** 1-3 tabs a week per 100 gallons
 - **Powder:** approximately 1 tablespoon every use or every other day when not in use (per 200 gallons)