

ALKALINITY IN HOT TUB TROUBLESHOOTING FLOWCHART

IS YOUR ALKALINITY IN THE IDEAL RANGE?

Total Alkalinity (TA) helps stabilize pH and protects your hot tub.

IDEAL RANGE: 80–120 ppm

TEST YOUR WATER

Use a test strip or test kit. Check Total Alkalinity (TA). Ideal range: 80–120 ppm



TA BELOW 80 PPM

TA IN RANGE

TA ABOVE 120 PPM

1

ALKALINITY TOO LOW

Low alkalinity can cause pH to drop, corrosion, and water irritation.

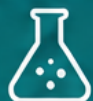
SIGNS

- ✓ pH constantly drops
- ✓ Water feels acidic or irritating
- ✓ Corrosion on metal parts
- ✓ pH changes wildly



COMMON CAUSES

- Heavy rain or frequent top-offs
- Overuse of pH decreaser
- Old water
- Acidic sanitizer use



LOWER THAN 80 PPM?

Follow the steps below to raise alkalinity. Goal: 80–120 ppm

2

ALKALINITY IN RANGE

Great! Your alkalinity is balanced. Keep it that way.



- ✓ pH is more stable
- ✓ Water feels more comfortable
- ✓ Sanitizers work effectively
- ✓ Helps protect equipment from corrosion and scale



MAINTAIN YOUR BALANCE

Test water 2–3 times per month and after heavy use or rain.

3

ALKALINITY TOO HIGH

High alkalinity can cause pH to rise, cloudy water, and scale.



SIGNS

- ✓ pH constantly rises
- ✓ Cloudy or hazy water
- ✓ Scale on shell or heater
- ✓ Need to add pH Down often



COMMON CAUSES

- Overuse of alkalinity increaser
- High alkalinity in source water
- Frequent top-offs with hard water



HIGHER THAN 120 PPM?

Follow the steps below to lower alkalinity. Goal: 80–120 ppm

HOW TO RAISE ALKALINITY (IF LOW)

1



Test alkalinity to confirm the current level.

2



Use sodium bicarbonate (Alkalinity Up). Add small amounts as directed.

3



Run jets for 20–30 minutes with cover open.

4



Wait 2–4 hours before testing again. Repeat if needed.

5



Once TA is 80–120 ppm, adjust pH to 7.2–7.8 if needed.

HOW TO LOWER ALKALINITY (IF HIGH)

1



Test alkalinity and pH. Record your results.

2



Use sodium bisulfate (Dry acid). Add small amounts as directed.

3



Run jets for 20–30 minutes with cover open.

4



Wait 4–6 hours before testing again. Repeat if needed.

5



Once TA is 80–120 ppm, adjust pH to 7.2–7.8 if needed.

PREVENT FUTURE ALKALINITY PROBLEMS



Test 2–3 times per month and after heavy use or rain.



Keep alkalinity between 80–120 ppm.



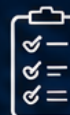
Use chemicals in small doses. Retest after each adjustment.



Clean filters regularly for proper water circulation.



Drain and refill every 3–4 months (or as needed).



Follow a complete water care routine: Alkalinity → pH → Sanitizer → Calcium.



REMEMBER

Stable alkalinity is the foundation of balanced water. Get your alkalinity right first—everything else becomes easier!



NOTE: Always follow product instructions and test water regularly.

When in doubt, consult a hot tub professional.