

PHOSPHATES IN HOT TUBS: TROUBLESHOOTING FLOWCHART

ARE PHOSPHATES IMPACTING YOUR HOT TUB WATER?

Phosphates feed algae and increase sanitizer demand, making water harder to keep clear and balanced. Lower levels = easier maintenance.

IDEAL RANGE: BELOW 300 ppb (IDEALLY UNDER 100 ppb)

TEST YOUR WATER

Use a phosphate test strip or digital tester.
Target: Below 300 ppb, ideally under 100 ppb.



PHOSPHATES LOW

PHOSPHATES ELEVATED

PHOSPHATES HIGH

1

PHOSPHATES LOW (GOOD)

Great! Low phosphates help your sanitizer work effectively and keep water clear.

SIGNS

- ✓ Water is clear and sparkling
- ✓ Sanitizer holds steady
- ✓ Low maintenance
- ✓ No algae or biofilm issues



KEEP IT THAT WAY!

- Follow prevention steps
- Stay on top of regular maintenance
- Keep testing monthly



MAINTAIN YOUR WATER

Test monthly. Keep phosphates below 300 ppb (ideally under 100 ppb).

2

PHOSPHATES ELEVATED

Not ideal, but manageable. Take action to reduce levels.

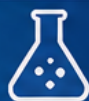
SIGNS

- ✓ Sanitizer demand is higher
- ✓ Water is dull or cloudy
- ✓ Foam forms more easily
- ✓ Filters clog faster
- ✓ Water harder to balance



COMMON SOURCES

- Rainwater
- Debris (leaves, pollen)
- Lotions, cosmetics
- Detergent on swimsuits
- High bather load
- Source water



TIME TO TAKE ACTION

Follow the steps below to lower phosphate levels.

3

PHOSPHATES HIGH

High phosphates increase sanitizer demand and can lead to water problems.

SIGNS

- ✓ Sanitizer won't hold
- ✓ Cloudy or dull water
- ✓ Foamy water
- ✓ Musty or swampy smell
- ✓ Water misbehaves



COMMON SOURCES

- Old water (over 3–4 mo.)
- Rainwater entering tub
- Dirty filters
- High phosphate fill water
- Organic contamination
- Lots of lotions/products



LOWER PHOSPHATES NOW

Follow the steps below to reduce phosphate levels effectively.

HOW TO LOWER PHOSPHATE LEVELS

1

TEST LEVEL



Test phosphate levels with a phosphate test strip or digital tester.
Target: Below 300 ppb, ideally under 100 ppb.

2

CLEAN FILTERS



Phosphates cling to dirty filters.
• Rinse thoroughly
• Deep-clean
• Replace if needed

3

ADD PHOSPHATE REMOVER



Use a spa-safe phosphate remover. Follow product directions carefully. Run pumps for 20–30 minutes.

4

SHOCK THE WATER



Shock oxidizes organics that increase overall water load and sanitizer demand.

5

RETEST AFTER 24 HOURS



Test phosphate levels again. If still high, repeat treatment if needed.

6

DRAIN & REFILL (IF NEEDED)



If phosphates remain very high or water is old, a drain and refill may be fastest and most effective.

COMMON PHOSPHATE LEVELS

0 – 100 ppb **Ideal**

100 – 300 ppb **Good**

300 – 600 ppb **Elevated**

600+ ppb **High**

Lower is always better!

HOW TO PREVENT HIGH PHOSPHATES



Shower before entering the spa.



Rinse swimsuits with plain water (no detergent).



Avoid excessive lotions, cosmetics, and hair products.



Keep the cover closed when not in use.



Remove leaves, pollen, and debris promptly.



Clean filters regularly.



Use a pre-filter when filling if your water has phosphates.



Drain every 3–4 months (or sooner if needed). Purge plumbing every drain and refill.



REMEMBER

Phosphates don't directly cause cloudy water, foam, or poor sanitizer performance, but high levels increase sanitizer demand and make water harder to maintain.



NOTE: Always follow product instructions and test water regularly.

Good maintenance • Consistent testing • Balanced chemistry = Clear, clean, enjoyable water!