

What Do pH, Hardness, Nitrates and Phosphates Actually Mean?

Your water test results can tell you more than whether a value is simply “high” or “low”. Each parameter gives you a clue about the condition of your water and whether further investigation may be needed.

Here’s a simple guide to what some of the most common water quality results actually mean.

pH

What is it?

pH tells you how acidic or alkaline your water is.

Why does it matter?

pH on its own does not usually determine whether water is safe to drink, but it can influence other aspects of water quality. It is closely linked to alkalinity and can also affect how metals such as copper, iron and lead behave in the water.

What should I look out for?

If the pH falls outside the acceptable range, the water should not be consumed until the cause has been investigated.

Hardness

What is it?

Water hardness is mainly caused by naturally occurring minerals in the water, such as calcium and magnesium.

Why does it matter?

Hard water is not generally considered a direct health concern, and some of the minerals associated with hardness can be beneficial. However, high hardness levels can affect the taste and general usability of your water. They can also cause scale build-up in pipes, taps and fittings, and may affect the performance and lifespan of household appliances such as kettles, geysers, washing machines and dishwashers.

What should I look out for?

If your water is very hard, you may notice a change in taste, white or chalky deposits on taps and surfaces, or scale build-up in appliances over time. Very high hardness levels may require further investigation or treatment.

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Nitrates

What is it?

Nitrates are substances commonly associated with fertilisers and sewage. Their presence in water may indicate contamination from these sources.

Why does it matter?

High nitrate levels can pose a health risk. They are particularly important to monitor because elevated levels have been associated with conditions such as “blue baby” syndrome and may also contribute to tiredness in adults.

What should I look out for?

Nitrate levels above the recommended range should be taken seriously and may require professional testing.

Phosphates

What is it?

Phosphates can enter water from a number of sources, including fertilisers and contamination from organic matter

Why does it matter?

Phosphates do not generally have a direct health impact at normal levels, but elevated levels can be a useful warning sign. High phosphate readings may indicate possible contamination from sources such as fertilisers or faecal matter.

What should I look out for?

A phosphate reading above **25 ppm** may warrant further investigation.



Important:

These results should always be considered together with the rest of your water quality test results.

If any of your readings fall outside the recommended range, or if you are unsure about the safety of your water, we recommend having it professionally tested by an accredited laboratory, as it may pose a potential health risk.

For further assistance or professional water testing, visit www.ilabwater.co.za or call 072 786 2814.