

HARDNESS (TOTAL)

Determination of Total Hardness (as CaCO₃) Range: 0 - 1200ppm



Notes	Health & Safety
Please read before proceeding with the test.	Refer to R & S phrases on individual bottles.
When performing the test hold the dropper bottles exactly upside down and allow drops to form slowly and fall off under their own weight.	Wear protective gloves and safety goggles when performing any tests using corrosive, harmful or irritant reagents.
Do not shake off drops as this will affect the accuracy of the test.	Do not ingest.

Take sample according to expected range.	Add 2 drops of Total Hardness Buffer (TH2) per 10ml.	Add 3 drops of TH5 or 1 scoop of THIP Powder.	Count drops of H/TH4/CH3 or TH3 until pure blue.
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Colours may vary depending on sample and test conditions.

Total Hardness ppm (as CaCO₃) = Number of Drops x Factor

ppm = mg/l

Expected Range	Sample Size	Titrant Used	Factor
5 – 15	40ml	TH3	0.5
10 – 30	20ml	TH3	1
20 – 60	10ml	TH3	2
50 – 150	40ml	H/TH4/CH3	5
100 – 300	20ml	H/TH4/CH3	10
200 – 600	10ml	H/TH4/CH3	20
400 – 1200	5ml	H/TH4/CH3	40

Add sufficient Total Hardness Indicator Powder (approx 1 level scoop) to produce a reasonable depth of colour that is neither too dark nor too light to observe a colour change.