

Reagents and Equipment

Please use reagent pack **RGPK016** – includes

Total Hardness Buffer – **A014**

Hardness Titrant – **A010**

Total Hardness Indicator Tablets – **AT010**

Method

1. Filter the sample if necessary and select an appropriate sample size based on the required PPM per drop of HARDNESS TITRANT as follows:

Sample size	PPM per drop
5ml	80ppm
10ml	40ppm
20ml	20ppm
40ml	10ppm
80ml	5ppm

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2. Add 5 drops of Total Hardness Buffer per 20ml of sample (minimum 5 drops) and 1 Total Hardness Indicator Tablet. Crush and swirl to dissolve.
3. Moisten and wipe the tip of the Hardness Titrant dropper to ensure it is clean and then add one drop at a time to the sample (counting the number of drops) until the colour changes from scarlet to royal blue.

EXAMPLE – for a 20ml sample

$$\begin{aligned} \text{Total Hardness} &= \text{Number of drops} \times 20 \\ \text{Number of drops of Hardness titrant} &= 18 \\ \text{Total Hardness} &= 18 \times 20\text{ppm} \\ &= 360\text{ppm (as CaCO}_3\text{)} \end{aligned}$$

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