



ENVIKIT GH – Ca - Mg

ENVIKIT 13GH-Ca-Mg



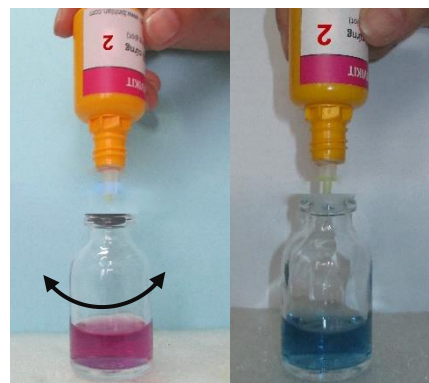
- Thank you for choosing products of Binh Lan ENVIBIOCHEM. Please read instruction carefully before proceeding to ensure accurate results.
- Reagents contain base. In case of contact, immediately flush skin with plenty of water.



1. Wash glass bottle and syringe by clean water. Fill up the glass bottle with 3 ml of sample water.



2. Add 1 spoon of the Reagent 1. Swirl to mix.



3. Slowly add the Reagent 2 dropwise, swirling to mix after each drop while counting number of drops until water turns purple. Continue until water changes to violet. Stop at the blue end point. A number of drops is a.

4. Wash glass bottle by clean water.
5. Repeat step 1.
6. Wipe the spoon with a dry tissue. Add 1 spoon of the Reagent 3. Swirl to mix. Slowly add the Reagent 4 dropwise, swirling to mix after each drop while counting number of drops until water turns purple. Continue until water changes to violet. Stop at the blue end point. A number of drops is b. Precipitate can appear during this step, but this has no effect on the result.

$$\text{Calcium} = [\text{Ca}] = b \times 17 \text{ (mg/l)} \quad (1)$$

$$\text{Magnesium} = [\text{Mg}] = (a - 0,2 \times b) \times 50 \text{ (mg/l)} \quad (2)$$

$$\text{General hardness (GH)} = a \times 208 \quad (3)$$

Example 1: a = 20, b = 20. [Ca] = 20 × 17 = 340 mg/l; [Mg] = (20 – 0,2×20) × 50 = 800 mg/l. GH = 20 × 208 = 4160 mg/l.

- If a or b <4, fill the glass bottle with 6m of sample in the steps 1 and 5. Calculate as in the expressions (1), (2), (3); then divide getting by 2. **Example 2:** water volume is 6 ml, a = 7, b = 6. [Ca] = (6 × 17) : 2 = 51 mg/l; [Mg] = (7 – 0,2×6) × 50 : 2 = 145 mg/l. GH = 208 × 7 : 2 = 728 mg/l.
- Salinity of a sample water is higher than 15 ‰: fill the glass bottle with 6m of sample in the steps 1 and 5. To calculate Ca, Mg, GH by the expressions (1), (2), (3), then multiply the getting by 2. **Example 2:** a = 10, b = 8. Ca = (10 × 17) × 2 = 340 mg/l; Mg = (10 – 0,2×8) × 50 × 2 = 840 mg/l. GH = 208 × 10 × 2 = 4160 mg/l.
- Always keep reagent bottles vertically while dropping. Release pressing after each 6 drops.
- Wash all items by clean water, leave to dry in the air, and store in the box for the next test.

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