

## Method

Dissolved carbon dioxide (CO<sub>2</sub>) is naturally present as a result of animal respiration, the decay of organic matter, and the decomposition of certain minerals. It is the major source of acidity in unpolluted water samples. Surface waters typically contain less than 10 ppm (mg/L) dissolved CO<sub>2</sub>, while ground waters, particularly if deep, may contain several hundred ppm (mg/L).

### The Caustic Titrant with pH Indicator Method

References: APHA Standard Methods, 22<sup>nd</sup> ed., Method 4500-CO<sub>2</sub> C - 1997. ASTM D 513-82, Total and Dissolved Carbon Dioxide in Water, Test Method E.

CHEMetrics' carbon dioxide test kits employ a sodium hydroxide titrant and phenolphthalein indicator. Results are expressed as ppm (mg/L) CO<sub>2</sub>.

## Visual Kits

**Range: 10-100 ppm**  
MDL: 10 ppm / Method: Caustic Titrant with pH Indicator

Titrets Kit	Cat#
	K-1910

Increments:  
10, 11, 12, 13, 14, 15, 16, 18, 20, 25, 30, 35, 40, 50, 70, 100 ppm

Kit comes in a cardboard box and contains everything needed to perform 30 tests: thirty ampoules with valve assemblies, Activator Solution, titrettor, 25 mL sample cup and instructions.

**Range: 100-1000 ppm**  
MDL: 100 ppm / Method: Caustic Titrant with pH Indicator

Titrets Kit	Cat#
	K-1920

Increments:  
100, 110, 120, 130, 140, 150, 160, 180, 200, 250, 300, 350, 400, 500, 700, 1000 ppm

Kit comes in a cardboard box and contains everything needed to perform 30 tests: thirty ampoules with valve assemblies, Activator Solution, titrettor, 25 mL sample cup and instructions.

**Range: 250-2500 ppm**  
MDL: 250 ppm / Method: Caustic Titrant with pH Indicator

Titrets Kit	Cat#
	K-1925

Increments:  
250, 275, 300, 325, 350, 375, 400, 450, 500, 625, 750, 875, 1000, 1250, 1750, 2500 ppm

Kit comes in a cardboard box and contains everything needed to perform 30 tests: thirty ampoules with valve assemblies, Activator Solution, titrettor, 25 mL sample cup and instructions.

### Kit Components common to Carbon Dioxide

Description	Cat#
Sample Cup Pack, 25 mL (6 ea)	A-0013
Titrettor Pack (1 ea)	A-0053

Instructions and MSDS(s) are posted on our website.

If no shelf-life is listed for a product, then the shelf-life is at least 2 years.

