

**REF 10654     1 x 10 mL bottles**

## **CO<sub>2</sub> CALIBRATOR**

Vials each containing 10 mL of aqueous sodium bicarbonate.

## **INTENDED USE**

The Carbon Dioxide calibrator facilitates measurements of Bicarbonate/Carbon dioxide on the EasyRA clinical chemistry analyzer when used in conjunction with Medica's CO<sub>2</sub> reagent. The CO<sub>2</sub> measurements are used in the diagnosis and treatment of numerous potentially serious disorders associated with changes in body acid-base balance.

## **CALIBRATION PRINCIPLE**

The EasyRA analyzer uses Beer's law of absorbance to calculate the CO<sub>2</sub> value in a sample:

$$\text{Abs} = \text{Factor} \times \text{Concentration}$$

The value of "Factor" is calculated by using a sample of a known value, in this case the CO<sub>2</sub> calibrator solution. The value of "Factor" is saved in memory until the next calibration routine is performed.

## **SAFETY PRECAUTIONS AND WARNINGS**

Follow good laboratory practices. The CO<sub>2</sub> calibrator does not contain any hazardous ingredients.

## **INSTRUCTIONS FOR HANDLING, STORAGE AND STABILITY**

The liquid calibrator is stable until the expiration date on the label if stored at 2-8°C. After opening and using the calibrator according to these instructions, the calibrator should be stored closed at 2-8 °C until the next use.

## **REAGENTS**

Sodium Bicarbonate                      30 ± 2 mmol/L

## **INSTRUCTIONS FOR USE**

The CO<sub>2</sub> calibrator is ready-to-use. Remove vial cap. Dispense three drops of calibrator into a vial and proceed with the calibration instructions in the EasyRA Operator's Manual.

## **VALUE ASSIGNMENT**

The CO<sub>2</sub> Calibrator is traceable to NIST reference material. The table below contains the assigned values for the CO<sub>2</sub> Calibrator:

Lot No. 25322                      Expires: 2026-11-18

<b>Analyte:</b>	<b>Assigned Value</b>	<b>Units</b>
CO <sub>2</sub>	28.02	mmol/L