

REF 10654 1 x 10 mL bottles

CO₂ 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 CO₂ reagent. The CO₂ 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 CO₂ 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 CO₂ 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 CO₂ 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 CO₂ 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 CO₂ Calibrator is traceable to NIST reference material. The table below contains the assigned values for the CO₂ Calibrator:

Lot No. 26050 Expires: 2027-02-19

Analyte:	Assigned Value	Units
CO ₂	27.71	mmol/L