

# AlcoCal®



## Breath Alcohol Standards from **Lion Laboratories Ltd** the leaders in breath alcohol measurement

The range of lion alcolmeter® instruments have been designed to read breath alcohol at a high level of accuracy. However, as is the case with most measuring instruments, they should be checked and calibrated on a regular basis. Lion offers two types of dry gas alcohol standards to enable users to carry out calibration checking and adjustment



### AlcoCal® - M



- Low pressure disposable canister
- Dispensing cap with connector tube
- Typically used by customers with a single instrument and a low test rate

### AlcoCal® - 2AL



- High pressure disposable cylinder
- Re-usable regulator / contents gauge

## AlcoCal® – M Specifications

- Shelf life of 6 months
- Maximum filling pressure 10.0 bar
- Number of samples approx 50
- Accuracy  $\pm 10\%$  of stated alcohol concentration
- Weight 0.120 kg
- Size 223 mm x 66 mm
- Supplied with explanatory booklet

## AlcoCal® – 2AL Specifications

- Shelf life of 36 months
- Maximum filling pressure 34.5 bar
- Number of samples approx 300
- Accuracy  $\pm 3\%$  of stated alcohol concentration
- Weight (incl. regulator) 0.758 kg
- Size (incl. regulator) 283 mm x 74 mm
- Supplied with explanatory booklet and 10 connector tubes

## Technical Information

### Alcohol Concentration Units

The most widely accepted unit for expressing the concentration of alcohol in expired breath is *milligrams of alcohol per one litre of breath* i.e. mg/l BrAC. All AlcoCal® standards are labeled in mg/l BrAC. A conversion table is supplied with each AlcoCal® to convert to other units of measurement of breath alcohol concentration (BrAC) and Blood Alcohol Concentration (BAC)

### Ambient Temperature and Pressure Effects

Each AlcoCal® standard is manufactured to give the labeled alcohol vapour concentration at sea level under the normal climatic range of atmospheric pressure. (Normally encountered ambient temperature changes have no effect on the measured alcohol concentration) However, appreciable vapour concentration errors will occur if the standard is used at high altitudes. (Note that this is due to the effect of Boyles law and not due to any inconsistency in the lion alcoholmeter instruments) In order to correct for this physical law an Altitude Correction Table is supplied with each AlcoCal® unit.

### Product Safety

For transportation purposes, AlcoCal® standards are classed as Dangerous Goods due to the fact that they are aerosols/pressurised containers. As such, transport of these products is subject to IATA, IMDG, ADR etc. regulations. Please contact Lion for further information. Safety Data Sheets are available on request.