



## Blood Gas Sample Instructions

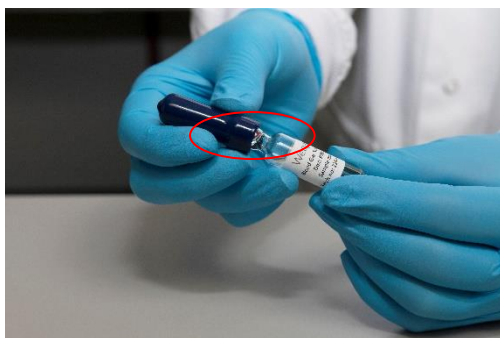
### Blood Gas Ampoules: Improving pO<sub>2</sub>, pCO<sub>2</sub>, and pH values

#### OPERATING PROCEDURE:

1. On receipt, store ampoules at ambient temperature (18-30°C), **do not refrigerate**.  
Samples can be stored at ambient temperature (18-30°C) for up to 2 weeks, if storage time is longer please refrigerate at 2 – 8°C.  
If ampoules have been refrigerated, allow to stand at ambient temperature (18-30°C) for 1 hour before continuing to next step.
2. The ampoule should be held between the thumb and index finger and shaken vigorously for 15 seconds. A foam will form above the solution (see photograph).



3. Swirl the ampoule gently to return the liquid to the bottom. Stand for 15 seconds to allow the bubbles to rise to the top of the solution.



4. To open, we would recommend using an ampoule snapper. Hold ampoule firmly on either side of the **red dot** with the dot facing upwards and snap backwards. **CAUTION! – Failure to snap the vial directly at this angle (AT the dot, snapping backwards) could leave sharp edges or in some cases shatter the vial.**
5. **Sampling**

Once open, sample directly from the **bottom** of the ampoule **within 2 minutes**. The foam layer delays the interaction of the atmosphere with the solution.

The sample can be taken into a syringe, sampled directly via the analyser sample probe or through a QC adaptor. The EQA vial diameter may be different to your QC vial and may therefore not fit your standard adaptor.



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For the **Siemens** blood gas analysers, Siemens recommend the use of Proficiency Survey Adaptors (part no. 10492250).

Once the vial is opened, insert immediately into the Quick Adaptor and introduce into the sample port as you would for a patient syringe sample.



For the **Radiometer** blood gas analysers, users may find it helpful to use the QUALICHECK Opener / Adaptor (REF 925-214).



For the **Alere epoc** instrument, Alere recommend that the sample should be taken into a plain 1mL or 3mL syringe using a blunt needle.

### 6. Mode of Analysis

#### a. Proteinised Aqueous Material:

Instrument	Mode to use for WEQAS EQA Analysis	Comment
<b>Nova Stat Profile Ultra/pHOx/CCX</b>	<b>Proficiency Mode</b>	Many Nova analyser users have implemented slope and intercept adjustments within their analysers. When the EQA sample is analysed in Proficiency Mode, the analyser automatically eliminates the programmed correlation factors.
<b>IL Gem</b>	<b>Proficiency Mode</b>	
<b>Roche b123</b>	<b>Proficiency Mode</b>	
<b>Alere epoc</b>	<b>QA Mode</b>	
<b>All other analysers</b>	As for a <b>patient sample</b>	Please analyse the sample as you would a <b>patient sample for all other analysers</b> . <u>The EQA samples should NOT be analysed as a QC sample</u> . This is particularly important for the <b>Roche Omni</b> analyser as analysing in QC mode will result in much lower pO <sub>2</sub> results.

#### b. pO<sub>2</sub> Accuracy Material:

The tonometered whole blood distributed for the annual accuracy survey should ALWAYS be analysed in **Patient Mode**.

#### Haematocrit Material:

Please note, samples for the haematocrit bi-annual distribution have different storage instructions. Samples can be stored at ambient temperature (18-30°C) for **up to 10 days**. If storage time is longer please refrigerate at 2 – 8°C. Follow the sampling instructions as for blood gas ampoules (**2 to 6** above). Once opened analyse **within 2 minutes**.

*Please ensure that point of care sites are given this information*