

Brief Operational Instructions for DHT Hb523 Haemoglobinometer

(Please note that full details are in Operator/Technical Manual accompanying instrument)

SETUP :

Do not touch the clear working side areas of the cuvette . Avoid contamination of them, handling cuvette only by the top of etched surfaces at front and back. When filling cuvette, ensure no air bubbles are present to affect measurement. Always ensure the outer surface of the cuvette is completely dry .

INITIAL CHECKS OF OPERATION AND FACTORY CALIBRATION :

Install a *clean, dry cuvette* into the cuvette aperture. A reading will be taken and displayed, accompanied by an audible signal. The value of the displayed reading must correspond to the value BR1 (± 5) shown on 'Certificate of Conformity'.

Check *zero* (negative 0 or number is not *zero*) and, if necessary, reset as follows:

Place cuvette, filled with 1-2ml of distilled water, into cuvette aperture of device. A reading will be taken and displayed, accompanied by a single audible signal.

If reading is not *zero*, remove cuvette and within 2 seconds press and hold "L" button until audible tones sound.

Repeat for any new type of cuvette before use: e.g. Plastic cuvettes, which may then be used instead of the cuvette provided.

Place the *Control Standard* into the cuvette aperture. A reading will be taken and displayed, accompanied by an audible signal. The value of the displayed reading must correspond to the value CR1 (± 5) shown on 'Certificate of Conformity'.

REFER TO MANUAL IF CHECK FAILS TO MATCH SPECIFIED VALUE.

USER INSTRUCTIONS

STOCK SOLUTION

This technique requires a **0.04% Ammonia** solution as a haemolysing agent

This can be made by adding **0.2ml** of concentrated Ammonia solution to **500ml** of distilled or deionised water. This prepared stock solution is stable in a tightly stoppered bottle.

(Caution! Concentrated Ammonia gives off harmful and irritant vapour - use only in well ventilated room, and keep stock bottle well stoppered).

OPERATING PROCEDURE SUMMARY

Pipette **20ul (micro litres)** of capillary blood into a test-tube containing **2ml of 0.04% ammonia** solution.

(***Note:** With an accurate pipette, **10ul (micro litres)** of capillary blood may be used instead, in **1ml of 0.04% ammonia solution.**)

Mix solution carefully.(Haemolysis takes only 1-2 seconds.)

Transfer contents into clean optical cuvette and place cuvette in the device.
Haemoglobin concentration in g/l is displayed, accompanied by an audible signal

Drain the cuvette and continue with the next sample.

CAUTION! *If the audible signal, accompanying the photometry process, ends before the cuvette is fully seated into the device, the result may be wrong.*

In that case, simply wait a few seconds for the next measurement cycle to complete.

It is necessary to wash the optical cuvette only after the completion of a batch of measurements or before long intervals between individual measurements