SIENCO,® Inc.

SCP2 Reference Viscosity Quality Control Kit REF 900-1323 (\224)

INTENDED USE

The SCP2 Reference Viscosity QC test is a simple means of verifying proper operation of the Sonoclot Analyzer. These instructions are written for the Sonoclot Coagulation & Platelet Function Analyzer Model SCP2.

SUMMARY AND PRINCIPLES

This test consists of a two point verification of the electromechanical oscillator and also ensures that the heating control is operating accurately. The two verification points are: 1) Probe-In-Air, and 2) Probe-In-Oil.

The Probe-In-Air is the response of the electromechanical oscillator to air and should be between -3 and 3.

The Probe-In-Oil is the response of the electromechanical oscillator to a reference viscosity liquid and should be between 46 and 58. Since the viscosity of the reference viscosity fluid is significantly temperature dependent, the Probe-In-Oil test point also verifies the temperature regulation.

The SCP2 Reference Viscosity QC procedure is simple, easy to perform and requires little operator time. It takes less than a minute set-up, and results are available in about 4 minutes. The QC test should be run on each channel each day the Sonoclot Analyzer is used or as required by your institution.

CONTENTS

Each SCP2 Reference Viscosity Quality Control Kit contains 50 cuvettes, 50 probes, 2 vials of reference viscosity fluid with end caps, and these instructions. These supplies provide 24 QC tests for each channel of the analyzer.

STORAGE



RUNNING A QC TEST

A SCP2 Reference Viscosity Oil QC test should be run DAILY on BOTH channels of the SCP2 Sonoclot Analyzer. Follow these instructions for both channels.

1) Make sure that the Sonoclot Analyzer is turned on and warmed up with the head assembly in the down

position. The Sonoclot Analyzer should maintain the temperature at 37°C. Check that the analyzer is ready to run a test (see operator's manual).

- 2) Repeatedly press the SELECT TEST button until "ViscQC" appears on the LCD display.
- 3) Open the head assembly by tilting it backwards to its stop. With a slight twisting motion, insert a clean probe over the probe mount hub inside the head assembly. Make sure that the probe is fully seated on the probe mount hub for proper operation.
- 4) Holding the cuvette at eye level, fill an empty cuvette with the reference viscosity fluid so that the fluid level comes to the bottom of the rim of the cuvette. Accurate fill can be observed by verifying that the bottom of the meniscus is at the same level as the bottom of the cuvette rim. There should be no air bubbles in the liquid in the cuvette. Use the tip of the plastic pipette to remove any air bubbles.



- 5) Place the filled cuvette in a convenience well. Do not place in the cuvette holder.
- 6) Close the head assembly and press the START/STOP button. The cuvette holder will be empty.
- 7) After about 10 seconds, the LCD display will show the Probe-In-Air result.
- 8) After the Probe-In-Air result is displayed, open the head assembly and insert the filled cuvette from the convenience well into the cuvette holder. Close head assembly to lower the probe into the liquid. It is not necessary to restart the Sonoclot Analyzer to complete the test.
- 9) After 4 minutes, the Probe-In-Oil result will be displayed on the Sonoclot Analyzer LCD display.
- 10) The Probe-in-Air value should be between -3 and3. The Probe-in-Oil value should be between 46 and 58. If results are outside these ranges see the Operational Precautions section of this insert.
- 11) The Sonoclot Analyzer will automatically stop the test after 4 minutes. Open the head assembly. Remove the cuvette and the probe using the probe extractor and discard. Keep the head assembly closed between samples to maintain thermal stability of the instrument.
- 12) Record results on the correct page of the SCP2 Reference Viscosity QC Record for the channel being tested. There is one result page for each channel of

the analyzer included in the kit. Results are displayed on the LCD display as well as in Signature Viewer.

PLEASE REFER TO THE OPERATOR'S MANUAL FOR ADDITIONAL INSTRUMENT USE INFORMATION.

ACCEPTED VALUES

The Clot Signal value typically is above 60 at the beginning of the test and levels off at a value between 46 to 58 after 4 minutes.

SCP2 Reference Viscosity QC Test 900-1323										
Result Acceptance Range										
Probe-in-Air	-3 to 3									
Probe-in-Oil 46 to 58										

If the value is outside this range, see the Operational Precautions listed below. If the value continues to be outside this range for several tests in a row and the procedure has been followed exactly, contact Sienco, Inc. or your distributor.

OPERATIONAL PRECAUTIONS AND LIMITATIONS

The Sonoclot Analyzer is a sensitive instrument, even slight variation in procedural technique can produce noticeable differences during quality control tests. If the test results are outside of the stated values, check the following items:

- 1) Only properly trained lab personnel and health care professionals should operate the analyzer.
- 2) The reference viscosity sample must be accurately filled. Under or over-filling a cuvette will affect the results. Inaccurate filling is the most common error when running the SCP2 Reference Viscosity Oil QC test.
- 3) The Sonoclot Analyzer requires a warm-up time to thoroughly heat the head assembly. Not allowing the Sonoclot Analyzer to warm up to 37°C will vary the numerical reading. A low instrument temperature will yield a high numerical reading. This is one reason why we recommend leaving the Sonoclot Analyzer on continuously.
- 4) The probe must be fully seated on the probe mount hub. Always insert and remove the probe by moving it vertically over the probe mount hub. Never move the hub horizontally.
- 5) Do not overfill the cuvette. The proper fill level is slightly below the inner rim of the cuvette.
- 6) The cuvette must be fully seated in the cuvette holder.
- Do not reuse the cuvette, reference viscosity fluid, or probe. Reuse may cause inaccurate results and/ or instrument damage.

- 8) Mechanical Factors: Fragments of dried blood in the transducer hub of the head assembly can interfere with the electromechanical oscillator and alter the quality control results.
- 9) The SCP2 Reference Viscosity Oil QC test does not validate performance of activation reagents. Plasma QC testing should be run to QC activation reagents.

BIBLIOGRAPHY

Sonoclot Analyzer SCP2 operator's manual Signature Viewer operator's manual



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SCP2 Reference Viscosity Oil Quality Control Record Channel 1

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