1.0 Purpose

Provide instruction for obtaining Specific Gravity measurements using the Densito 30PX.

2.0 Scope

This procedure applies to using specific gravity as a method for Quality Assurance.

3.0 Responsibility

Quality Associates are responsible for the testing of materials to ensure that they meet required specifications.

4.0 Safety Considerations

Safety is a condition of employment. Employees are not authorized to work in an unsafe manner and are prohibited from harming the environment of the facility or community.

5.0 Materials/Equipment

- Densito 30PX
- Deionized water
- Kimwipe Tissues

6.0 Procedure

Accuracy Check

1) Press and hold down the **esc** button to turn on the Densito 30PX. The display will read **Ready**.
2) Push drain button downward completely.
3) Ensure that the sample tube is located in a density standard or in distilled water.
4) Press the **Fill** button slowly to fill the measuring cell. Make sure that no air bubbles are contained in the measuring cell.
5) Press the **ok/Measure** key, the instrument automatically executes a measurement and the result appears in reverse display.
6) The result for water must be 1.000. If the deviation is <0.0005, the instrument is ready for measurement.
7) If the deviation is >0.0005, the instrument must be adjusted. Adjustment procedure is as follows:
    - Press and hold the ↓ key until **CALIB (Water)** appears in the display.
    - The instrument will adjust automatically (approx 1 minute).

- After adjustment is completed, the measured deviation from the theoretical value and **Execute?(No)** appears.
- Press the ↓ or ↑ key until **Execute? (Yes)** appears.
- Press the **ok/Measure** Key to confirm.
- The adjustment is now confirmed and ready for measurement.

Measurement

1) Test the instrument for accuracy with distilled water or a density standard as described above.
2) Ensure that the measuring cell is clean before each measurement. Insufficient cleaning will yield inaccurate results.
3) Put the sample tube into the sample.
4) Press the Fill button slowly to fill the measuring cell.
5) Be sure there are no air bubbles in the measuring cell.
6) Press the **ok/Measure** Key to start measuring. There is an icon that will blink during the measurement.
7) The results will appear in reverse display.

Cleaning

1) Put the sample tube into a beaker filled with soapy water.
2) Press the Fill button slowly to fill the measuring cell with the soapy water.
3) Press the drain button to clear the measuring cell of the soapy water.
4) Repeat several fill and drain cycles with the soapy water to ensure the measuring cell is clean.
5) Once the measuring cell is clean, repeat the fill and drain cycles using distilled water to remove soap residue. When the drain water is no longer foamy, the soap residue has been removed.

7.0 Reference Documents

N/A

8.0 Change Information

New Document