Quality Control

At least 3 levels of control material should be analyzed each shift. In addition, these controls should be run with each new calibration and after specific maintenance or troubleshooting procedures.

After maintenance and prior to running controls, the 290 mOsm/kg reference solution should be run. Acceptable result range is 290 ± 2 mOsm/kg. Record the standard result on the maintenance binder sheet. If the standard result is outside the acceptable range, repeat on a fresh aliquot and record the repeat result. If the repeat standard result is not within the acceptable range, the analyzer must be recalibrated. Document that a calibration was performed on the maintenance sheets.

Quality Control Material

Description	Storage
Bio Rad Multiqual Control Level 1	2° - 8°C
Bio Rad Multiqual Control Level 3	2° - 8°C
Bio Rad Liquichek Urine Chemistry Control Level 2	2° - 8°C
Advanced Instruments ClinitrolTM Reference Solution (10 X 2mL ampules, 290 mOsm/kg)	Room Temp

Bio Rad Multiqual controls are received frozen and are stable until their expiration date when stored at -20°C to -70°C. Avoid storage in frost-free freezer and exposure to light.

To thaw the controls, allow vials to stand at room temperature (18°C to 25°C) until thawed, but no longer than one (1) hour, then store at 2°C to 8°C. For optimal analyte stability in the thawed state, promptly return vials to 2°C to 8°C storage after each use.
Thawed, opened controls stored at 2°C to 8°C are good for 7 days. Before each use, gently swirl contents until homogenous with no visible signs of precipitate. Minimize time at room temperature to no more than 20 minutes each day.

Bio Rad Liquichek Urine Chemistry controls are stable until the expiration date when received and stored unopened at 2°C to 8°C. Open bottles of controls when stored tightly capped at 2°C to 8°C are good for 30 days.
Before sampling, allow this product to reach room temperature (18 to 25°C). Gently swirl the vial several times to ensure homogeneity. After each use promptly replace the stopper and return to 2 to 8°C storage. If there is evidence of microbial contamination or excessive turbidity in the product, discard the vial.

Reference solution ampules are received and stored at room temperature and are stable until the expiration date stated on bottle. Bottles of controls in use are aliquoted and stored at room temperature and are good for 30 days.

Testing Procedure

Osmometer Startup

The Osmometer will be always on for standby operation.

If Osmometer is off, turn the instrument on by pushing the rocker-style power switch on the instrument's back panel into the on (|) position. There will be a short delay until the instrument's display becomes active. Each time the power is turned on, the display provides critical information, such as software version and probe bin numbers. Record this information in the Service Log at the end of this User's Guide. Maintaining a record of this information will facilitate any service that may become necessary.

The user is then prompted to run a one-minute self-diagnostic test. It is highly recommended that the user runs this test. Bar graphs will appear, showing the block (B) and the sample (S) probe temperatures while the instrument cools down, and then while the instrument warms up. (See image below.)