

Interpreting results

Data generated using Advanced Instruments standards and reference solutions may be analyzed according to the accuracy and precision specifications of the instrument (see *Product Specifications - The Advanced Osmometer Model 3320 User's Guide* (p/n 3325)).

Laboratories may choose to employ one, two, or three standard deviations (SD) for accuracy based on what is relevant in their laboratories. For normally distributed data, approximately 68% of the individual data values will fall within one standard deviation of the mean, approximately 95% within two standard deviations, and approximately 99.7% within three standard deviations.

| Advanced Instruments Standards and Reference Solutions | Precision | Accuracy (mOsm/kg H ₂ O) | | |
|--|--|-------------------------------------|-----------|-----------|
| | | 1 SD | 2 SD | 3 SD |
| Clinitrol™ 290 Reference Solution | Standard deviation ≤2 mOsm/kg H ₂ O | 288-292 | 286-294 | 284-296 |
| 50 mOsm/kg Calibration Standard | Standard deviation ≤2 mOsm/kg H ₂ O | 48-52 | 46-54 | 44-56 |
| 100 mOsm/kg Calibration Standard | Standard deviation ≤2 mOsm/kg H ₂ O | 98-102 | 96-104 | 94-106 |
| 200 mOsm/kg Calibration Standard | Standard deviation ≤2 mOsm/kg H ₂ O | 198-202 | 196-204 | 194-206 |
| 400 mOsm/kg Calibration Standard | Standard deviation ≤2 mOsm/kg H ₂ O | 398-402 | 396-404 | 394-406 |
| 500 mOsm/kg Calibration Standard | Coefficient of variation ≤0.5% | 497-503 | 494-506 | 491-509 |
| 850 mOsm/kg Calibration Standard | Coefficient of variation ≤0.5% | 845-855 | 840-860 | 835-865 |
| 900 mOsm/kg Calibration Standard | Coefficient of variation ≤0.5% | 895-905 | 890-910 | 885-915 |
| 1000 mOsm/kg Calibration Standard | Coefficient of variation ≤0.5% | 995-1005 | 990-1010 | 985-1015 |
| 1500 mOsm/kg Calibration Standard | Coefficient of variation ≤0.5% | 1492-1508 | 1484-1516 | 1476-1524 |
| 2000 mOsm/kg Calibration Standard | Coefficient of variation ≤0.5% | 1990-2010 | 1980-2020 | 1970-2030 |



Model 3320 Osmometer

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