

Comparison of specific gravity analysis of feline and canine urine, using five refractometers, to pycnometric analysis and total solids by drying

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Supplementary Table 1. Specific gravity results from analysis of pure solutions of creatinine, NaCl and urea using five different refractometers^a. Note that the chemical form of creatinine is a light powder that is difficult to weigh and dispense accurately, therefore some error in concentrations of creatinine are possible.

| Substance | Concentration | Atago 1 | Rei 2 | Rei 3 | Vet Dog | Vet Cat | Atago Cat |
|------------|---------------|---------|--------|--------|---------|---------|-----------|
| Creatinine | 100 g/L | 1.048 | >1.035 | >1.035 | 1.045 | 1.042 | 1.041 |
| Creatinine | 75 g/L | 1.040 | 1.035 | 1.035 | 1.034 | 1.030 | 1.030 |
| Creatinine | 66.7 g/L | 1.037 | 1.032 | 1.032 | 1.031 | 1.026 | 1.026 |
| Creatinine | 50 g/L | 1.030 | 1.024 | 1.024 | 1.023 | 1.019 | 1.019 |
| Creatinine | 33 g/L | 1.024 | 1.017 | 1.017 | 1.017 | 1.014 | 1.014 |
| Creatinine | 25 g/L | 1.020 | 1.014 | 1.013 | 1.013 | 1.010 | 1.010 |
| Creatinine | 10 g/L | 1.010 | 1.005 | 1.005 | 1.005 | 1.004 | 1.004 |
| NaCl | 100 g/L | 1.045 | >1.035 | >1.035 | 1.040 | 1.036 | 1.036 |
| NaCl | 75 g/L | 1.037 | 1.033 | 1.033 | 1.031 | 1.027 | 1.027 |
| NaCl | 66.7 g/L | 1.035 | 1.029 | 1.029 | 1.028 | 1.024 | 1.024 |
| NaCl | 50 g/L | 1.029 | 1.023 | 1.022 | 1.022 | 1.018 | 1.018 |
| NaCl | 33 g/L | 1.020 | 1.015 | 1.015 | 1.015 | 1.012 | 1.012 |
| NaCl | 25 g/L | 1.016 | 1.012 | 1.012 | 1.011 | 1.009 | 1.009 |
| NaCl | 10 g/L | 1.010 | 1.005 | 1.005 | 1.004 | 1.004 | 1.004 |
| Urea | 200 g/L | >1.050 | >1.035 | >1.035 | 1.060 | 1.057 | 1.057 |
| Urea | 150 g/L | 1.048 | >1.035 | >1.035 | 1.046 | 1.042 | 1.042 |
| Urea | 100 g/L | 1.038 | 1.034 | 1.034 | 1.032 | 1.028 | 1.028 |
| Urea | 50 g/L | 1.025 | 1.018 | 1.018 | 1.017 | 1.014 | 1.014 |
| Urea | 25 g/L | 1.015 | 1.009 | 1.009 | 1.009 | 1.007 | 1.007 |
| Urea | 10 g/L | 1.009 | 1.004 | 1.004 | 1.003 | 1.003 | 1.003 |
| Urea | 2 g/L | 1.003 | 1.001 | 1.001 | 1.000 | 1.000 | 1.001 |

^a Atago 1 was a Uricon refractometer (Atago Corp, Tokyo Japan); Rei 2 was a Reichert TS meter, Rei 3 was a Leica TS meter (both were Model 10400A Reichert TS meters; Cambridge Instruments Inc, Buffalo NY, USA); Vet Cat and Vet Dog were the two scales, for cats and dogs, respectively, for a Model 10436 AO Veterinary refractometer (AO Scientific Instruments, Buffalo NY, USA); Atago Cat was a digital Atago 'Pocket' PAL-USG Cat refractometer (Atago Corp).

