

CHEM 222 Unknown Reporting

As you report your unknowns, be sure to use the units below. Remember, when calculating percent, the following conventions hold:

$$\% \text{ w/w} = \frac{\text{mass component in grams}}{\text{mass mixture in grams}} \times 100\%$$

$$\% \text{ w/v} = \frac{\text{mass component in grams}}{\text{volume mixture in mL}} \times 100\%$$

$$\% \text{ v/v} = \frac{\text{volume component in mL}}{\text{volume mixture in mL}} \times 100\%$$

It is critical to keep track of, and account for, all dilutions that occur in taking your original sample to the form that was measured in the analysis.

Experiment	Units to Report
KHP	% w/w KHP in your solid sample
Magnesium	% w/v Mg in the 100 mL volume you dilute the sample to. (% w/v = 100% x g Mg/mL solution)
Nickel	% w/w nickel in the solid sample
K _a	Equivalent weight (g acid/mol OH ⁻ neutralized)
Iron	% w/w Fe in your original sample
Fluoride	% w/v F ⁻ in the 100 mL volume you dilute the sample to. (% w/v = 100% x g F ⁻ /mL solution)
Lead	% w/w Pb in your solid sample
GC	% v/v ethanol in your original sample