

CHEMISTRY

Name:

PERCENT COMPOSITION PRACTICE PROBLEMS

1. A 43.40mg sample of an alcohol contains 15.10mg O, 22.6mg C, and the rest is hydrogen. What is its percent composition?
2. Ethyl mercaptan is an odorous substance added to natural gas to make leaks easily detectable. A sample of ethyl mercaptan was composed of 1.64g S, 1.23g C, and 0.30g hydrogen. What is the percent composition?
3. Calculate the percent composition of each of the following compounds:
 - a) CO
 - b) CO₂
 - c) KMnO₄
 - d) Co(NO₃)₂

4. Cadaverine, one of the compounds responsible for the odor of decaying flesh, has the formula $\text{NH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{NH}_2$. What is the percent composition of cadaverine?
5. Which contains more carbon, 4.71g of glucose, $\text{C}_6\text{H}_{12}\text{O}_6$, or 5.85g of ethanol, $\text{C}_2\text{H}_6\text{O}$?
6. A sample of an alloy of aluminum contains 0.0972mol Al and 0.0381mol Mg.
- What is its percent composition?
 - How many grams of the alloy are needed to supply 150.0g of Al?