

Friday Worksheet

Name:

¹HNMR spectroscopy 2

1) An unknown compound was analysed and found to contain the following composition by mass.

68.2 % carbon, 13.6% hydrogen and 18.2% oxygen

a) Determine the empirical formula of the compound.

b) If a pure 0.100 mol sample of the compound weighs 8.80 grams find the molecular formula.

c) Below is a ¹HNMR spectrum of the compound, each signal has a different colour. Give the structural formula for the compound.

