

Methylheptenone contains the elements C, H and O and has a lemon like odour. The complete combustion of 192 mg of methylheptenone produces 528 mg of CO_2 and 216 mg of H_2O / What is the empirical formula of methylheptenone?

The combustion of 40.5 mg of a compound containing C, H, and O and extracted from the bark of a sassafras tree, produce 110.0 mg of CO_2 and 22.5 mg of H_2O . The molar mass of the compound is 162 g/ mol. Determine its empirical and molecular formulas.