

Task:

a compound contains 1.65% phosphorous. The minimum molecular weight of the compound is.....?

Solution:

The minimum molecular weight is if there is one phosphorous atom in the compound.

The atomic weight of phosphorous is 31 (taken from the periodic table of elements).

1.65% - 31 g/mol

100% - x g/mol

The minimum molecular weight of the compound is

$$X = 31 \cdot 100 / 1.65 = 1879 \text{ g/mol}$$

Answer: MW = 1879 g/mol