

$$wt\% = \frac{m(std) \times M_w(5) \times \text{molar ratio} \times P(std)}{m(5) \times M_w(std)} = 99\%$$

$m(5) = 32.3 \text{ mg}$; $M_w(5) = 256.14 \text{ g/mol}$

$m(std) = 14.0 \text{ mg}$; $M_w(std) = 168.19 \text{ g/mol}$

$P(std) = 98\%$; $\text{molar ratio} = (1.53/1)/(3/3) = 1.53$

