

Taking into consideration that Avogadro constant (N_A) is $6.02214129(27) \times 10^{23} \text{ mol}^{-1}$, formula units of sodium sulfate in 0.333 moles of Na_2SO_4 are:

$$N(\text{Na}_2\text{SO}_4) = N_A \cdot n(\text{Na}_2\text{SO}_4) = 6.02214129(27) \times 10^{23} \text{ mol}^{-1} \cdot 0.333 \text{ mol} = 2 \cdot 10^{23} \text{ units.}$$