
Stoichiometry: Mole-Mole Problems



How many moles of hydrogen are needed to completely react with 2.00 moles of

$\text{Ni}(\text{C}_2\text{H}_3\text{O}_2)_3$ (aq) $\text{Ni}(\text{C}_2\text{H}_3\text{O}_2)_3$ (aq) $\text{Ni}(\text{C}_2\text{H}_3\text{O}_2)_3$ (s) $\text{Ni}_2(\text{C}_2\text{O}_4)_3$ (aq)
a) 244 g excess $\text{Ni}(\text{C}_2\text{H}_3\text{O}_2)_3$ unreacted d) 3.93 g $\text{Ni}_2(\text{C}_2\text{O}_4)_3$
b) 76.3% yield f) 3.63 g actual yield

a) LR = $\text{Li}_2\text{C}_2\text{O}_4$ b) $\text{Li}_2\text{C}_2\text{O}_4$ precipitates out of solution