

Marks
5

- A galvanic cell consists of a Ni^{2+}/Ni half cell with $[\text{Ni}^{2+}] = 1.00 \text{ M}$, and a Ag^+/Ag half cell with $[\text{Ag}^+] = 1.00 \text{ M}$. Calculate the electromotive force of the cell at 25°C .

Answer:

Calculate the equilibrium constant of the reaction at 25°C .

Answer:

Calculate the standard free energy change of the reaction at 25°C .

Answer:

Is the reaction spontaneous? Give reasons for your answer.

Express the overall reaction in the shorthand voltaic cell notation.

