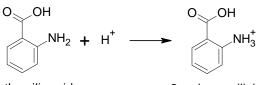
Answer on Question#37993-Chemistry-Organic Chemistry

Question

Anthranilic acid at pH = 0 exists as ...? and migrates toward which electrode during electrolysis?

Answer

The pH = 0 means that the solution is strongly acidic, i.e. there is abundance of protons in it. Anthranilic acid (or 2-aminobenzoic acid) involves an amino group in its structure. In strongly acidic medium amino group is protonated:



anthranilic acid

2-carboxyanilinium

Thus, at pH = 0 anthranilic acid exists as **2-carboxyanilinium ion**.

Since the ion is positively charged, it migrates to the negatively charged electrode (**cathode**) during electrolysis.