

Answer on Question#49801- Chemistry, Other

Question:

In which case is iron corroded faster, if a protective coating is partly damaged:

a) tin- or zinc-plated iron?

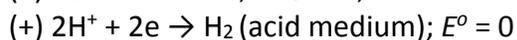
b) chromium- or nickel-plated iron?

Explain your answer by writing down the equations of the cathodic and anodic reactions in acid, neutral and alkaline medium.

Answer:

a) Iron corrodes faster in case of tin-plated iron.

Fe – Sn

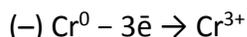
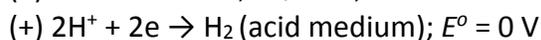
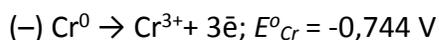


Fe – Zn



b) Iron corrodes faster in case of nickel-plated iron.

Fe – Cr



Fe - Ni

