

ABSTRACT

A wear of an electrode is prevented as much as possible, thereby efficiently electrolyzing a sulfuric acid solution and the like. An electrolysis method includes: passing an electrolytic solution through an electrolysis cell including at least a pair of an anode and a cathode; and supplying the electrodes with an electric power, so as to electrolyze the electrolytic solution, wherein a viscosity of the electrolytic solution is set in a range in response to a current density upon the electric power supply to carry out the electrolysis. The viscosity of a sulfuric acid solution as the electrolytic solution is equal to or less than 10cP when the current density is equal to or less than 50A/dm², the viscosity of the sulfuric acid solution is equal to or less than 8cP when the current density is from more than 50 to 75A/dm², and the viscosity of the sulfuric acid solution is equal to or less than 6cP when the current density is from more than 75 to 100A/dm². Particularly when a highly-concentrated sulfuric acid solution is electrolyzed at a high current density using diamond electrodes, the electrolysis process can be carried out highly efficiently while a wear of the electrode is reduced.