

Abstract

A process is disclosed for preparation of purified terephthalic acid containing 200 ppmw or less of p-toluic acid. A filter cake of purified terephthalic acid is prepared by filtering, under a differential pressure of about or greater than 0.5 psi over the system pressure and a temperature within the range of from about 100°C to about 205°C, an aqueous slurry of purified terephthalic acid containing a solution of p-toluic acid. The aqueous solution of p-toluic acid remaining in the filter cake of purified terephthalic acid is displaced from the filter cake by water under a pressure gradient over the system pressure at a temperature within the range of from about 100°C to about 205°C. Pressure flash evaporation of water remaining in the filter cake occurs upon release of the system pressure to lower pressure with consequent lower temperature. The crystalline terephthalic acid product containing 200 ppmw or less p-toluic acid can be dried under atmospheric pressure. Purified terephthalic acid is useful for the manufacture of polyesters from which clothing and related goods are made.

