

ABSTRACT

There is provided an oilification process for chlorine-based plastic waste characterized in that a mixture of plastic waste including chlorine-based plastic and an aqueous solution containing carbonate of an alkali metal or hydroxide or carbonate of an alkali earth metal or several kinds of these compounds, in which the concentration of dissolved oxygen is controlled so as to be not higher than 0.5 mg/liter, is heated; chlorine in the plastic waste is released during a process of transfer to a supercritical condition and/or under a supercritical condition; and the plastic waste is decomposed, or characterized in that an aqueous solution containing carbonate of an alkali metal or hydroxide or carbonate of an alkali earth metal or several kinds of these compounds is heated; melted plastic waste including chlorine-based plastic is mixed in the aqueous solution during a process of transfer to a supercritical condition and/or under a supercritical condition; the concentration of dissolved oxygen in the aqueous solution is controlled so as to be not higher than 0.5 mg/liter before or during the mixing of the plastic waste; chlorine in the plastic waste mixed in the aqueous solution is released; and the plastic waste is decomposed.