

ABSTRACT

An industrial advantage process for producing high-purity 3-hydroxytetrahydrofuran easily and simply,

5 which comprises reducing a 4-halo-3-hydroxybutyric acid ester (1) with a boron hydride compound and/or an aluminum hydride compound as a reducing agent in an organic solvent immiscible with water;

10 treating the reaction mixture with an acid and water to thereby effect conversion to the corresponding 4-halo-1,3-butanediol and at the same time giving an aqueous solution containing said compound;

 carrying out the cyclization reaction of the 4-halo-1,3-butanediol in said aqueous solution;

15 extracting the resulting 3-hydroxytetrahydrofuran from the 3-hydroxytetrahydrofuran-containing aqueous solution using an organic solvent immiscible with water; and

 isolating the 3-hydroxytetrahydrofuran by concentration and/or distillation of the solution obtained.