

Title (en)

METHOD FOR OBTAINING SUGAR ALCOHOLS HAVING FIVE TO SIX CARBON ATOMS

Title (de)

VERFAHREN ZUR GEWINNUNG VON ZUCKERALKOHOLEN MIT FÜNF BIS SECHS KOHLENSTOFFATOMEN

Title (fr)

PROCÉDÉ D'OBTENTION D'ALDITOLS COMPORTANT CINQ À SIX ATOMES DE CARBONE

Publication

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Application

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Abstract (en)

[origin: WO2014056486A1] The invention relates to a method for obtaining a high yield of sugar alcohols containing five to six carbon atoms from cellulose-containing materials. In a first step the starting materials (e.g. microcrystalline cellulose, alpha-cellulose, wood and cellulose-containing residues, such as sugar cane bagasse or wood shavings) and an acid are brought into close contact with the substrates by an impregnation carried out in the liquid or gaseous phase. In addition, in a second step the starting materials covered with acid and dried are brought into contact by the action of mechanical energy such that the cellulose-containing materials are degraded into water-soluble products. Subsequently, in a third step, sugar alcohols having five to six carbon atoms are obtained in a high yield and in high selectivity from the water-soluble products in aqueous solution by hydrolytic hydration by means of a metal-containing catalyst under hydrogen pressure.

IPC 8 full level

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Citation (search report)

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