

Title (en)
PROCESS FOR THE PREPARATION OF CHIRAL 3-HYDROXY PYRROLIDINE COMPOUND AND DERIVATIVES THEREOF HAVING HIGH OPTICAL PURITY

Title (de)
VERFAHREN ZUR HERSTELLUNG EINER CHIRALEN 3-HYDROXYPYRROLIDINVERBINDUNG UND DERIVATEN DAVON MIT HOHER OPTISCHER REINHEIT

Title (fr)
PROCÉDÉ DE SYNTHÈSE D'UN COMPOSÉ CHIRAL DE TYPE 3-HYDROXYPYRROLIDINE ET DE DÉRIVÉS DUDIT COMPOSÉ DE PURETÉ OPTIQUE ÉLEVÉE

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Abstract (en)
[origin: WO2007024113A1] The present invention relates to an effective process for the preparation of optically pure chiral 3-hydroxypyrrolidine or derivatives thereof. More particularly, the present invention relates to an efficient process for the preparation of chiral 3-hydroxypyrrolidine or derivatives thereof, comprised of introducing a suitable protecting group to the starting material 4-chloro-3-hydroxybutyronitrile. Introduction of the hydroxy-protecting group provides advantages: efficient prevention of formation of side products, enhanced performance of the reduction of the nitrile group of the starting material, and enhanced performance of in-situ in- tramolecular cyclization. The chiral 3-hydroxypyrrolidine compound is produced in high yield and with high purity.

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C07D 207/12 (2013.01); **Y02P 20/55** (2015.11)

Citation (search report)
• [DA] EP 0269258 A2 19880601 - ROBINS CO INC A H [US]
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• [A] HARRIS B D ET AL: "SYNTHESIS OF 3S-PYRROLIDINOL FROM L-GLUTAMIC ACID", SYNTHETIC COMMUNICATIONS, TAYLOR & FRANCIS GROUP, PHILADELPHIA, PA, vol. 16, no. 14, 1 January 1986 (1986-01-01), pages 1815 - 1822, XP008075594, ISSN: 0039-7911
• See references of WO 2007024113A1

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