

Title (en)
METHOD FOR PRODUCING ASTAXANTHIN ESTERS

Title (de)
VERFAHREN ZUR HERSTELLUNG VON ASTAXANTHINESTERN

Title (fr)
PROCÉDÉ DE PRÉPARATION D'ESTERS ASTAXANTHINE

Publication
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Application
EP 15750406 A 20150811

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• EP 14184483 A 20140911
• EP 2015068445 W 20150811

Abstract (en)
[origin: WO2016037785A1] The invention relates to an environmentally friendly, resource-conserving, and economical method for producing astaxanthin esters of formula 1, wherein astaxanthin of formula 2 is doubly esterified with fatty acid chlorides of general formula 3. For this purpose, compounds 2 and 3 are reacted in an organic solvent in the presence of a nitrogen-containing base of general formula 4. The invention further relates to the non-therapeutic use of diester 1, wherein R stands for a residue that is selected from the group consisting of C13-C19 alkyl, C13-C19 alkenyl, C13-C19 alkydienyl, and C13-C19 alktrienyl, in the nourishment of humans or animals, and to diester 1 produced according to the method, for therapeutic use as a medication and as an ingredient for a medical preparation.

IPC 8 full level
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Citation (search report)
See references of WO 2016037785A1

Citation (examination)
• PATRICIA HUBBARD ET AL: "Mechanism of Amine-Catalyzed Ester Formation from an Acid Chloride and Alcohol", JOURNAL OF ORGANIC CHEMISTRY, vol. 63, no. 3, 1 February 1998 (1998-02-01), pages 677 - 683, XP055520848, ISSN: 0022-3263, DOI: 10.1021/jo9716643
• ZHIHUI LIU ET AL: "4-(N,N -Dimethylamino)pyridine Hydrochloride as a Recyclable Catalyst for Acylation of Inert Alcohols: Substrate Scope and Reaction Mechanism", ORGANIC LETTERS, vol. 16, no. 1, 16 December 2013 (2013-12-16), US, pages 236 - 239, XP055520837, ISSN: 1523-7060, DOI: 10.1021/ol4030875

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