

Title (en)

CHROMAN-6-OLS WITH AN EXTENDED LIPOPHILIC SIDE CHAIN IN POSITION 2, THEIR MANUFACTURE AND USE

Title (de)

CHROMAN-6-OLE MIT EINER VERLÄNGERTEN LIPOPHILEN SEITENKETTE IN POSITION 2, IHRE HERSTELLUNG UND VERWENDUNG

Title (fr)

CHROMAN-6-OLS À CHAÎNE LATÉRALE LIPOPHILE ÉTENDUE EN POSITION 2, LEUR FABRICATION ET LEUR UTILISATION

Publication

**EP 3774757 A1 20210217 (EN)**

Application

**EP 19714655 A 20190329**

Priority

- EP 18164856 A 20180329
- EP 2019058071 W 20190329

Abstract (en)

[origin: WO2019185904A1] The present invention is directed to a process for the manufacture of a compound of formula (III), comprising the step of reacting a compound of formula (I) with a compound of formula (II) in the presence of an acid catalyst and in a mixture of two solvents, wherein n is 1 or 2, and R1 and R3 are independently from each other H or C1-5-alkyl, and R2 is either H or C1-5-alkyl or C1-5-alkyloxy, preferably with the proviso that at least one of R1, R2 and R3 is H, and wherein the first of the two solvents is selected from ethylene carbonate, propylene carbonate, 1,2-butylene carbonate, gamma-butyrolactone and water, and the second of the two solvents is selected from hexane, cyclohexane, heptane, ortho-xylene, meta-xylene, para-xylene, mesitylene, pseudocumene, methyl tert-butyl ether, and toluene. The present invention is also directed to the compound of formula (III-3), as well as to the use of compounds of formula (III), especially to the use of compound of formula (III-3) and the use of compound of formula (III-4), as antioxidants, especially in feed, such as e.g. in feed for aquatic animals, in feed for terrestrial animals (especially pet food, feed for pigs and feed for poultry) and in feed for insects, and in feed ingredients, such as in fish meal, in poultry meal, in insect meal, and in PUFA-containing oils such as marine oil, microbial oil, fungal oil, algal oil and PUFA-containing plant oil. The present invention is further directed towards feed and feed ingredients containing at least one compound of formula (III), especially containing a compound of formula (III-3) and/or a compound of formula (III-4).

IPC 8 full level

**A23L 13/10** (2016.01); **A23L 17/10** (2016.01); **C07D 311/72** (2006.01)

CPC (source: EP)

**A23L 13/10** (2016.07); **A23L 17/10** (2016.07); **C07D 311/72** (2013.01)

Citation (search report)

See references of WO 2019185904A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2019185904 A1 20191003**; CN 113166090 A 20210723; EP 3774757 A1 20210217

DOCDB simple family (application)

**EP 2019058071 W 20190329**; CN 201980035462 A 20190329; EP 19714655 A 20190329