Title (en)

METHOD OF FRACTIONATING FATTY ACIDS HAVING TWO DIFFERENT CARBONS BY MOLECULAR DISTILLATION

Title (de)

VERFAHREN ZUR FRAKTIONIERUNG VON FETTSÄUREN MIT ZWEI VERSCHIEDENEN KOHLENSTOFFEN DURCH MOLEKULARE DESTILLATION

Title (fr)

PROCEDE DE FRACTIONNEMENT D'ACIDES GRAS A DEUX CARBONES DE DIFFERENCE PAR DISTILLATION MOLECULAIRE

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Application

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Abstract (en)

[origin: WO2021191385A1] The invention relates to a method of fractionating fatty acids having two different carbons by double-pass molecular distillation, in particular fractionating between eicosapentaenoic acid and docosahexaenoic acid, and compositions of oil originating from micro-organisms enriched with eicosapentaenoic acid or docosahexaenoic acid produced by such a method. To this end, the invention relates to a method of fractionating fatty acids having two different carbons by molecular distillation, in particular fractionating between eicosapentaenoic acid and docosahexaenoic acid, characterised in that the method comprises: (i) a step of reaction between an oil originating from micro-organisms, which comprises omega-3 polyunsaturated fatty acids in the form of triglycerides, and an alcohol in the presence of a chemical or enzyme catalyst, (ii) a first step of molecular distillation, in a high vacuum, of the oil obtained in step (i) in a wiped film evaporator coupled to a rectification column comprising at least seven theoretical plates, and collection of a first residue and a first distillate, (iii) a second step of molecular distillation, in a high vacuum, of the residue collected in step (ii) in the wiped film evaporator coupled to the rectification column comprising at least seven theoretical plates, and collection of a second residue and a second distillate.

IPC 8 full level

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