

ABSTRACT

A microbial oil comprising: a specific amount of at least one polyunsaturated fatty acid having at least 20 carbon atoms in fatty acid alkyl ester form and/or in free fatty acid form; and specific amount of thermally-produced fatty acid having from 16 to 22 carbon atoms in a fatty acid alkyl ester form and/or a free fatty acid form. A production method thereof comprising: providing a starting oil containing at least one polyunsaturated fatty acid having at least 20 carbon atoms in an alkyl ester form and/or a free fatty acid form obtained from microbial biomass; performing a rectification of the starting oil under specific conditions; and obtaining the aforementioned microbial oil. A concentrated microbial oil obtained using the production method described above, and a production method thereof. An agent for treating or preventing an inflammatory disease comprising the microbial oil or the concentrated microbial oil.