

MICROBIOIL ®

Summary

- New technology for the production of biodiesel from crude glycerine.
- Iterative process that increases by 2-3% the overall productivity of a biodiesel plant.

Using the technological platform MICROBIOTOOLS ®, Neuron BioIndustrial has found micro-organisms able to metabolize large quantities of crude glycerine. Under specific growth conditions, these micro-organisms accumulate oils with a fatty acid composition in accordance with the European norm EN 14214 and the ASTM F6751-08 Standards.

The microbial biomass containing more than 50% of lipids (as dry weight) can be blended with vegetable seeds before the extraction process to increase the amount of oil obtained.

Alternatively, the microbial oil can be extracted using standard procedures as used in the transesterification process. It is also possible to carry out a methanolysis with the microbial biomass to directly obtain the mixture of methyl esters.

Applications

The process allows the conversion of a by-product (glycerine) into a raw material (oil) increasing the overall productivity of the plant by 2-3%.

Patent application number

WO2009118438

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25th of March, 2008

References