## **Accepted Manuscript**

Biodiesel production by the methylic-alkaline and ethylic-enzymatic routes: discussion of some environmental aspects

Cleaner Production

Marcia de Mello, André Young, Hugo Villardi, Fernando Pessoa, Andrea Salgado

PII: S0959-6526(17)30039-2

DOI: 10.1016/j.jclepro.2017.01.032

Reference: JCLP 8779

To appear in: Journal of Cleaner Production

Received Date: 15 August 2016

Revised Date: 04 January 2017

Accepted Date: 06 January 2017

Please cite this article as: Marcia de Mello, André Young, Hugo Villardi, Fernando Pessoa, Andrea Salgado, Biodiesel production by the methylic-alkaline and ethylic-enzymatic routes: discussion of some environmental aspects, *Journal of Cleaner Production* (2017), doi: 10.1016/j.jclepro. 2017.01.032

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

### **ACCEPTED MANUSCRIPT**

#### Highlights

- Soybean biodiesel production by methylic-alkaline catalysis is simulated in Aspen HYSYS.
- Soybean biodiesel production by ethylic-enzymatic catalysis is simulated in Aspen HYSYS.
- Environmental impacts are assessed by means of the 12 Principles of Green Chemistry
- Environmental impacts are assessed by means of sustainability metrics
- The ethylic-enzymatic catalysis is a more environmentally friendly route.

#### Download English Version:

# https://daneshyari.com/en/article/5480292

Download Persian Version:

https://daneshyari.com/article/5480292

<u>Daneshyari.com</u>